# Live Healthy

# ON-COMMUNICABLE DISEASE STRATEGIC PLAN 2014-2018



A Collaborative Effort by the Department of Public Health and Social Services and the Non-Communicable Disease Consortium December 2013



#### Non-Communicable Disease (NCD) Consortium Guam Hilton Resort and Spa January 14, 2011



#### Non-Communicable Disease (NCD) Consortium Marriott Hotel October 18, 2013



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# PRIORITIZING OUR HEALTH, PROMOTING ACTIVE LIFESTYLES

Hafa Adai! Healthy living isn't about extreme diet fads and exercise programs, it's about making better choices every day. To make these choices, it is important that we arm the members of our community with the tools they need.

Heart disease, diabetes, stroke, and cancer are the leading causes of death on Guam and throughout the region. However, these diseases can be prevented. With support from the community, we can save more lives.

The Non-Communicable Disease Consortium (NCD) continues to push initiatives to help us prioritize health on our island. Through various public awareness campaigns, conferences, and extensive surveys, the NCD Consortium has developed a strategic plan to reduce the risks of non-communicable diseases. Their objectives are simple—healthier and active lifestyles.

The collaboration of government agencies, non-profit organizations, and private sector businesses ensures that the NCD Consortium continues to achieve their objectives—build a healthy vibrant community and save lives!

Si Yu'os Ma'ase,

EDDIE BAZA CALVO

RAY TENORIO

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# MESSAGE FROM THE CHAIRMAN OF THE COMMITTEE ON HEALTH & HUMAN SERVICES

Håfa Adai!

I wish to extend my most sincere thanks and appreciation to the Department of Public Health and Social Services, members of the Non-Communicable Disease Consortium, and their many partners for updating our island's NCD Strategic Plan for the years 2014-18.

Many NCD's share a common root cause: sedentary lifestyles that lead to obesity that in turn leads to diagnosis of an illness or chronic condition that is treatable but not curable. Classic and most common examples in Guam are diabetes, heart disease, and certain types of cancer. They require treatment for the remainder of a patient's life. It is costly, unnecessary and easily preventable.

The high rates of non-communicable, chronic diseases on our island have obvious and measurable health consequences. There are also economic and social costs. We know that not only the diseases, but also the toll they take can be reduced, prevented, and in some cases eliminated by the adoption of healthier lifestyles. This makes their impact even more tragic.

There was a time when the high prevalence of non-communicable diseases on our island was considered alarming. That time has passed. We are well aware of the challenge before us and the plan you have adopted is more than just a recommendation of what needs to be done. It is a call to action. As Chairman of the Committee on Health I will continue to support and work closely with you to implement public policy that reflects the goals and objectives in the 2014-2018 Strategic Plan.

You have provided an invaluable service to our community. Now is the time for the rest of us to join you. Together we can help improve health and well being of individuals, families, and our entire island.

Si Yu'os Ma'ase' and Live Healthy Guam!

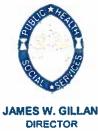
God bless,

Dennis G. Rodriguez, Jr.

EDDIE BAZA CALVO GOVERNOR

#### **GOVERNMENT OF GUAM**

#### DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES DIPATTAMENTON SALUT PUPBLEKO YAN SETBISION SUSIAT



RAY TENORIO

LEO G. CASIL

LEUTENANT GOVERNOR

DEPUTY DIRECTOR

Hafa Adai! Chronic diseases, such as heart disease, cancer, stroke and diabetes have long plagued our island. In fact, these diseases are still the four leading causes of death on Guam with heart disease being number one. These diseases have high mortality rates, are expensive to treat and have long term effects. Chronic diseases are also preventable.

The Pacific Island Health Officers Association (PIHOA) has declared a regional state of health emergency in the United States Affiliated Pacific Islands (USAPI) due to the epidemic of non-communicable diseases (NCDs) in the region. The USAPI is made up of Guam, American Samoa, the Republic of the Marshall Islands, the Federated States of Micronesia, the Republic of Palau, and the Commonwealth of the Northern Mariana Islands.

The Guam NCD Consortium made up of representatives from various government agencies, notfor-profit organizations and the private sector, was formed to combat and address the burden NCDs were placing on families and communities. Through their hard work and dedication, the second Guam Non-Communicable Disease Strategic Plan has been developed to continue the fight against the NCD epidemic.

The Department of Public Health and Social Services stands ready to assist in implementing the objectives of this important plan.

JAMES W. GILLAN

Director

LEO G. CASIL
Deputy Director

Non-communicable diseases (NCD) are among the most common and recurring health problems facing Guam's people today. While public health has made strides in combating communicable diseases, non-communicable diseases (or chronic diseases) have proven to be a greater threat to the overall health and well-being of people on Guam. NCDs are among the leading causes of death, and they contribute considerably to long-term disability and poor quality of life. NCDs are responsible for illness in large numbers of adults in Guam and it is probable that the number of adults with more than one NCD is highly likely.

The Guam NCD Strategic Plan 2014 -2018 builds on existing plans for specific NCDs developed by the Department of Public Health and Social Services and community partners. Examples include the Guam Comprehensive Cancer Control Plan 2007 – 2012, the Guam Diabetes Prevention and Control Program Plan 2010-2013, Guam Preventive Health and Health Services Action Plan 2013 and the Non-Communicable Disease Strategic Plan 2010-2013. It also integrates with components of the five-year Prevention Education and Community Empowerment (PEACE) Strategic Plan 2013-2018 led by the Guam Behavioral Health and Wellness Center. Links to these and other plans are provided in Appendix 2.

It complements the efforts by the Guam Department of Public Health and Social Services (DPHSS) to create a long range vision for community health improvement, beginning with the establishment and mapping of community health indicators and strengthening of data surveillance and monitoring. These efforts have produced a Community Health Assessment (CHA) Plan to build capacity for health surveillance.

Based on reviewing results of the DPHSS Guam Behavioral Risk Factor Surveillance (BRFSS) Survey, the Department of Education Guam Youth Risk Behavior Survey (YRBS), information from the Guam Cancer Registry (University of Guam Cancer Research Center), and preliminary raw data from the DPHSS Guam Office of Vital Statistics Reports, the NCD teams crafted goals, objectives, strategies, and interventions that address non-communicable diseases. The NCD Plan is built upon the themes of targeting modifiable risk factors, prioritizing objectives based on policy, systems and environmental change, selecting WHO "best buys" or promising practices built on evidence, and community empowerment for health.

The Guam NCD plan aligns with the World Health Organization Regional NCD Action Plan and when possible, WHO "best buys" were selected by the community stakeholders. It also aligns with the four strategic directions and priorities in the National Prevention Strategy – healthy and safe community environments, clinical and community preventive services, empowered people, and elimination of health disparities.

The overarching goal of the Guam NCD Plan is to reduce premature NCD deaths by 25% by the end of 2018.

#### 2. OVERVIEW OF STRATEGIC PLAN DEVELOPMENT

On September 13, 2011, the Guam Department of Public Health and Social Services was awarded its CDC Chronic Disease Prevention and Health Promotion grant, also known as Coordinated Chronic Disease Program (CCDP). The main deliverable required under the CCDP is the creation of a statewide chronic disease plan that focuses on heart disease, stroke, diabetes, cancer and other chronic diseases. Guam had prepared a 'Non-Communicable Disease (NCD) Plan for 2011-2013' that was already in place funded by the Secretariat of the Pacific Community (SPC) and being implemented. However, the plan did not address all the criteria/domains called for in the CCDP grant. Therefore the Guam NCD Consortium, the governing body created to address NCDs in our community, was approached to review and update the existing plan and take the domains into consideration. There are seven NCD Action Teams as follows: 1) Alcohol Prevention and Control, 2) Nutrition and Obesity, 3) Physical Activity, 4) Tobacco Prevention and Control, 5) Data and Surveillance, 6) Policy and Advocacy, and 7) Communications. Consideration is being given to establish an eighth team, Clinical and Community Linkages. An executive committee composed of the action team leaders, coalition leaders, and the Administrator of the Department of Public Health and Social Services' Bureau of Community Health Services currently constitutes the leadership of the NCD Consortium.

Several members of the NCD Action Teams received training on Policy, Systems, and Environmental (PSE) change on June 7, 2013 sponsored by the Guam Comprehensive Cancer Control and the Tobacco Prevention and Control Programs. The training helped these members to focus their interventions in areas with the best possibility to make positive change happen and affect the greatest number of people in Guam. In mid-June 2013, each of the Action Teams and stakeholders were convened to update the existing NCD Plan and to take into account the four CCDC key domains – epidemiology and surveillance, environmental approaches that support and reinforce healthy behaviors, health care system interventions, and strategies that strengthen community clinical linkages. Between July and September 2013, several more planning and breakout sessions were held during the regular, monthly NCD meetings to finalize the plan and obtain input from the community. On September 12, 2013, Guam held a community forum on the NCD Plan with well over 100 people in attendance. Input on the plan was obtained during the forum and incorporated into the final draft during subsequent NCD meetings held during the months of October and November 2013.

The Framework for NCDs was based on several guidelines including the World Health Organization's (WHO) Global NCD Plan and the Regional Plan. Reviews of WHO "Best Buys" and CDC evidence based/promising practices were performed and shared with each of the NCD Action Teams as they went through the planning process.

Each team was presented with available Guam data collected through the BRFSS and YRBS, as well as preliminary data on NCD deaths from the Guam Office of Vital Statistics. This assisted the Teams to target specific areas needing improvement, and determining target audiences for interventions. Since almost half of NCD-related deaths occur prematurely and the causes of NCDs are known, and the majority of these risk factors are largely modifiable, such as tobacco use, sedentary lifestyle, poor nutrition, obesity and harmful use of alcohol, the Guam NCD plan will primarily focus on reducing modifiable risk factors and the intermediate risk factors. Refer to Table 1 for causes of NCD related deaths and illustration of modifiable risk factors.

Table 1. Causes of NCD Related Deaths

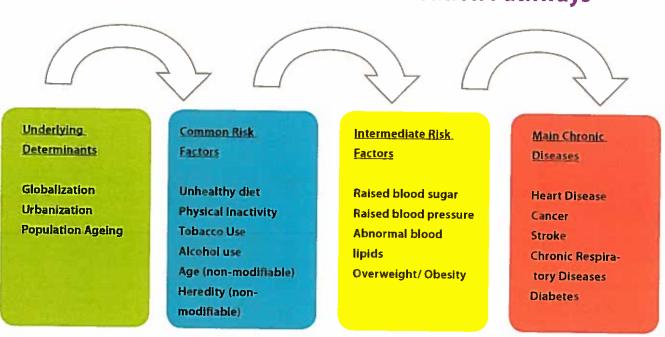
Non-modifiable:	<ul><li>Age</li><li>Heredity</li></ul>
Modifiable:	Tobacco use
	Lack of physical activity
	Alcohol abuse
	Poor nutrition/diet
	Obesity

**EXECUTIVE SUMMARY** 

**OVERVIEW OF** 

The causation pathways of NCDs are shown in the following diagram beginning with underlying determinants, progressing to common risk factors, intermediate risk factors, then development to chronic/NCD diseases. The Guam NCD Plan focuses primarily on the second and third pathways.

# **Non-Communicable Disease Causation Pathways**



### NCD GOALS, MISSION AND VALUES

#### Vision

We envision an island working collectively towards a chronic disease free Guam by empowering the community to be healthy and active.

#### Mission

Our NCD Consortium exists to lead, collaborate with and empower individuals, families and communities in working towards a non-communicable disease-free Guam.

#### **Values**

- Respect: We respect opinions, each other and value the unique perspective that each individual brings.
- Collaboration/Partnership: Working together cooperatively with each other for solutions.
- Innovation: We keep an open-mind for creative ways to solve problems.
- Impact: Our work will have positive outcomes, difference, and results on the community.
- Commitment: We are committed to evidenced-based Comprehensive NCD Control that continually engages the community.
- Trust: We trust one another to act with integrity and in good faith.
- Cultural Competence: We value cultural diversity, sensitivity and competence.
- Resourcefulness: We will share resources in our common efforts to address NCDs.

#### 3. OVERVIEW OF LEAD INDICATORS AND 2018 TARGETS

Table 2. Leading Health Indicators and 2018 Targets

TOPIC AREA	INDICATOR	BASELINE	2018 GUAM NCD TARGET AND PERCENT INCREASE OR DECREASE FROM BASELINE	OTHER GLOBAL, REGIONAL, US TARGETS
Health Insurance Coverage	Adults who have no health coverage	Year: 2011 Adults 18 – 64 years of age Guam: 30.2% USA: 21.3%		
		Year: 2011 All Adults Guam: 28.0% USA: 17.9%		
Alcohol Abuse	Youth/Adults binge drinking	Year: 2011 Guam Youth: 13.6% USA: 21.9%	12.2% (-10%)	-10% (PNCD 2025)
		Year: 2012 Guam Adults: 19.3% USA: 16.9%	17.4% (-10%)	24.4% (HP2020) -10% (PNCD 2025)
Healthy Eating/ Nutrition	Adults who eat the recommended number (5 servings) of fruits and vegetables daily	Year: 2009 Guam: 24.3% USA: 23.5%	29.3% (+21%)	
	High School Aged Youth  Ate Vegetables ≥ 3 times/day	Year: 2007 Guam: 12.7% USA: 13.2%	13.3%(+5%)	
	Ate Fruits/juices ≥ 3 times/day	Guam: 15.6% USA: 21.3%	16.4%(+5%)	
Overweight & Obesity	Youth/Adults Overweight	Year: 2011 Guam Youth: 16.5% USA: 15.2%	11.5%(-5%)	Halt the rise (PNCD 2025)
		Guam Adults: 36.6% USA: 35.8%		
	Youth/Adults Obese	Year: 2011 Guam Youth: 15.4% USA: 13.0%	10.4%(-5%)	
		Guam Adults: 27.4% USA: 27.7%	22.4%(-5%)	30.5% (HP2020)
High Salt Intake	Age-standardized mean popula- tion intake of salt/sodium per day in grams of adults (18 years of age and older)	Baseline salt consumption data not available. To be determined.	-10%	-10% (WHO 2025 & PNCD 2025)
Breast-feeding	Children who are breastfed	Baseline data not available. To be determined.		
	Guam WIC mothers who breastfed their infants at 6 months (Source: DPHSS WIC Program)	Year 2012: 7.33%	8.1%(+10%)	

2018 GUAM

TOPIC AREA	INDICATOR	BASELINE	2018 GUAM NCD TARGET AND PERCENT INCREASE OR DECREASE FROM BASELINE	OTHER GLOBAL, REGIONAL, US TARGETS
Physical Activity	High School Youth/Adults who meet physical activity guideline	Year: 2011 Guam Youth <sup>1</sup> : 37.4% USA: 49.5%	0.4	+10% (PNCD 2025)
	4	Guam Adults: 48.2% USA: 51.6%	56.0%(+16.2%)	
	High School Youth who did not go to PE. classes in an average week (when in school)	Guam Youth: 58.7% USA: 48.2%		
Tobacco Use	Youth/Adults who are current smokers	Year: 2011 Guam Youth: 21.9% USA: 18.1%	18.0% (-18.0%)	16% (HP2020) -30% (WHO2025)
		Guam Adults: 30.5% USA: 21.2%	25.0% (-18.0%)	12% (HP2020) -30% (WHO2025) & (PNCD 2025)
Use of Cancer Screening	Colorectal cancer screening (age 50+ who have ever had sigmoidoscopy or colonoscopy)	2010 Guam: 37.8% 2010 USA: 65.2%		70.5% (HP2020)
	Prostate cancer screening – men aged 40+ who had a PSA test within the past 2 yrs.	2010 Guam: 28.3% 2010 USA: 53.2%		
	Breast cancer screening – women aged 40+ who had a mammogram within the past 2 yrs.	2010 Guam: 64.4% 2010 USA: 75.2%	***	
	Cervical cancer screening – women aged 18+ who had a Pap test within the past 3 yrs.	2010 Guam: 67.8% 2010 USA: 81.3%		93.0% (HP2020)
Cancer	Cancer incidence per 100,000 population (age adjusted)	(2003-2007) Guam Males <sup>2</sup> : 394.1 Guam Females: 263.6	354.7 (-10%) 212.9 (-10%)	
	Adult cancer prevalence (adults ever diagnosed with cancer)	2011 Guam: 1.8% 2011 USA: 6.6%	1.6% (-10%)	
	Cancer deaths/mortality per 100,000 population (age adjusted)	2010 Guam³: 111.1 (all ages (30-69 years old) 2010 Guam⁴: 133.6 2010 USA: 172.8	100.1 (-10%)	160.6 HP2020) -25% (WHO2025) & (PNCD 2025)

TOPIC AREA	TOPIC AREA INDICATOR		BASE	LINE	NCD TARGET AND PERCENT INCREASE OR DECREASE FROM BASELINE	OTHER GLOBAL, REGIONAL, US TARGETS
Cardiovascular Disease (CVD)	Adult heart att	Adult heart attack prevalence  Adult coronary heart disease prevalence  Heart disease deaths/mortality per 100,000 population (age adjusted)		3.1% 4.4%	3.0% (-3.2%)	
				2.8% 4.1%	2.0% (-28.6%)	
	per 100,000 po			old) 223.1 218.2 254.9 179.1	229.4 (-10%)	-25% (WHO2025) & (PNCD 2025)
CVD High Risk Factors Cholesterol		Adults had cholesterol checked within 5 yrs.	2011 Guam: 2011 USA:	61.9% 75.5%	75.5% (+22.0%)	
	Adult prevalence (18-64 years old)	2009 Guam <sup>7</sup> : 2009 USA:	24.4% 38.3%	20.0% (-18.0%)		
		Adult prevalence (18+ and older)	2011 Guam: 2011 USA:	33.1% 38.4%	29.8% (-10.0%) GPHB	
Stroke Adult stroke pre		revalence	2011 Guam: 2011 USA:	3.2% 2.9%	2.9% (-9.4%) GPHB	
	Stroke deaths 100,000 popu (age adjusted		(all ages) 2010 Guam*: 2010 USA:	71.6 39.1	-	-25% (WHO2025) & (PNCD 2025)
Stroke Risk Factors	Hyperten- sion – High	Adult prevalence (18- 64 years old)	2009 Guam <sup>9</sup> : 2009 USA:	22.2% 30.9%	21.8% (-1.8%) GPHB	
	Blood Pressure	Adult prevalence (18+ and older)	2011 Guam: 2011 USA:	20.8% 30.8%	20.4% (-1.9%) GPHB	26.9% (HP2020) -25% (WHO2025) & (PNCD 2025)
Diabetes	Adult Diabete	s Prevalence	2011 Guam: 2011 USA:	9.9% 9.5%	9.7% (-2.0%) GPHB	
dea moi per pop (age	Diabetes deaths/ mortality	(ages 30-69 years old)	2010 Guam <sup>10</sup> : 2010 USA:	39.9 20.8	37.9 (-5.0%) GDP	Halt the rise (WHO2025) & (PNCD 2025)
	per 100,000 population (age adjusted)	(all ages)	2010 Guam <sup>11</sup> : 2010 USA:	37.1 20,8	35.1 (-5.4%) GDP	65.8 (HP2020)

NOTE: GDP (Guarn Diabetes Plant), GPHB (Guarn Preventive Health Block Grant), HP (Healthy People – USA), PNCD (Pacific Non-Communicable Disease), WHO (World Health Organization). Legend: '--' no specific target identified.

**OVERVIEW OF LEAD INDICATORS AND 2018 TARGETS** 

National Center for Chronic Disease Prevention and Health Promotion, Chronic Disease Indicators, State Area Profile, Guam and USA, website last visited July 17, 2013. Department of Public Health and Social Services, Guam Cancer Facts and Figures 2003-2007. Murphy SL, Xu JQ, Kochanek KD. Deaths: Final Data for 2010. National vital statistics reports; Vol 61, No. 4. Hyattsville, MD: National Center for Health Statistics. May 8, 2013. Department of Public Health and Social Services. Guam Community Health Assessment Indicators, preliminary data.

Murphy SL, Xu JQ, Kochanek KD. Deaths; Final Data for 2010. National vital statistics reports; Vol 61, No. 4, Hyattsville, MD: National Center for Health Statistics. May 8, 2013. Department of Public Health and Social Services. Guam Community Health Assessment Indicators, preliminary data.

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Department of Public Health and Social Services, Guam Community Health Assessment Indicators, preliminary data.

Murphy \$L, Xu JQ, Kochanek KD. Deaths: Final Data for 2010. National vital statistics reports: Vol 61, No. 4. Hyattsville, MD: National Center for Health Statistics. May 8, 2013.

GUAM

#### 4. BURDEN OF NON-COMMUNICABLE DISEASES ON GUAM

For the past ten years, Non-communicable diseases (NCDs) such as heart disease, cancer, cerebrovascular disease/stroke and diabetes mellitus, accounted for 58.9% of all deaths in Guam. Table 3 shows that for the time period 2006 to 2010, heart disease represented 28.6% (1,124) of all deaths, cancer 16.8% (662), cerebrovascular disease/stroke 8.0% (315), and diabetes 5.4% (212). There was a negligible change when comparing the percentage of the top four NCD deaths for the two five-year periods from 2001 to 2005 (58.9%) and 2006 to 2010 (58.8%).

Table 3. Top Four Non-Communicable Disease Deaths, Guam: 2001-2005 and 2006-2010

	YEARS: 2	YEARS: 2001 – 2005		006 - 2010
	NCD Deaths	Percent of NCD Deaths/ All Deaths	NCD Deaths	Percent of NCD Deaths/ All Deaths
Heart Disease Deaths	1,082	31.5%	1,124	28.6%
Cancer Deaths	552	16.1%	662	16.8%
Cerebrovascular / Stroke Deaths	274	8.0%	315	8.0%
Diabetes Deaths	116	3.4%	212	5.4%
Total Top Four NCD Deaths	2,024	58.9%	2,313	58.8%
Total All Deaths	3,437	100.0%	3,932	100.0%

Source: Government of Guam, Department of Public Health and Social Services, Office of Vital Statistics (Preliminary unpublished data) and US DHHS, National Vital Statistics Reports

Shown in Table 4 are the Guam and U.S. age-adjusted death rates and top NCD related death rates for 2010. Guam's overall death rate (810.6) was 8.5% higher than the U.S. rate of 747.0 per 100,000 population. Guam's 2010 heart disease death rate of 254.9 was 42.3% higher than the U.S. rate (179.1). The Guam cerebrovascular death rate of 71.6 per 100,000 population was 83.1% higher than the U.S. rate (39.1), while Guam's diabetes death rate (37.1) was 78.4% higher than the U.S. rate (20.8). The exception was Guam's cancer death rate (133.6) which was 22.7% lower than the U.S. (172.8).

Table 4. Age Adjusted NCD Death Rates per 100,000 Population, Guam and U.S.: 2010

	GUAM (1)	US (2)
Deaths, All Causes	810.6	747.0
Heart Disease	254.9	179.1
Cancer	133.6	172.8
Cerebrovascular Disease/Stroke	71.6	39.1
Diabetes	37.1	20.8

Source: Government of Guam, Department of Public Health and Social Services, Office of Vital Statistics (Preliminary unpublished data) and US DHHS, National Vital Statistics Reports

Notes: Age-adjusted rates per 100,000 U.S. standard population. Since death rates are affected by the population

composition of a given area, age-adjusted death rates should be used for comparisons between areas because

they control for differences in population composition.

Sources: The Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics,

National Vital Statistics Report Volume 61, Number 4, May 8, 2013, Table 19. Available at http://www.cdc.gov/nchs/data/

nvsr/nvsr61/nvsr61\_04.pdf

Footnotes: 1. Age-adjusted death rates for Puerto Rico, Virgin Islands, and Guam are calculated using different age groups in the

weighting procedure.

2. The death rate for the U.S. does not include data from Puerto Rico, Virgin Islands, and Guam.

#### Heart Disease Burden

For the five-year period 2007-2011, there were 1,183 heart disease deaths representing 28.9% of all deaths. The heart disease deaths (253) in 2011 were 8.6% higher than the previous four-year annual average of 233. (Refer to Table 5.) The Guam age adjusted death rates for 2011 have not yet been published in the National Vital Statistics Report, but the published data for CY 2010 shows that the Guam rate (254.9) was significantly higher than the U.S. rate (179.1). (Refer to Table 4.)

Table 5. Heart Disease Deaths, Guam: 2007 - 2011

ITEM		4-Year Annual Averag					
	2007	2008	2009	2010	2011	Total	(CY 2007-2010)
Heart Disease Deaths	234	194	257	245	253	1,183	233
All Deaths	778	783	835	857	842	4,095	2,610

Source: Guam Department of Public Health and Social Services, Vital Statistics Office

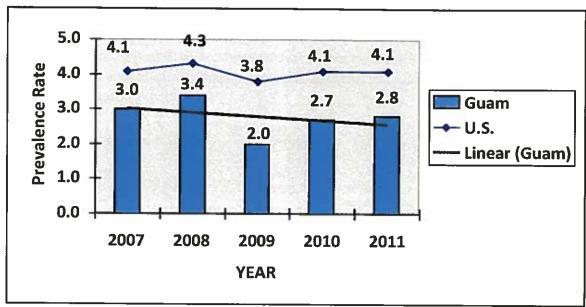
Despite higher mortality rates for Guam, the most recent BRFSS 2011, showed the adult prevalence rates for "coronary heart disease" at 2.8% (age 18 and older), and 3.1% for "heart attack" were lower than the U.S. rates. (Refer to Table 6.) However, Guam's coronary heart disease rate showed a 40% increase in 2011 from the low rate of 2.0% reported in 2009. (Refer to Figure 1.) Fewer Guam adults (61.9%) reported having had their blood cholesterol checked compared to the U.S. (75.5%). Guam's rate (33.1%) of high blood cholesterol was also lower than the U.S. rate (38.4%). (Refer to Table 6.)

Table 6. Heart Disease & Related Data, Guam and U.S.: 2010-2011

ITEM	GUAM	U.S.
Heart Disease Mortality/Deaths per 100,000 population, age- adjusted, CY 2010 (Source: National Vital Statistics Report, Deaths: Final Data for 2010, Vol. 61, No. 4, May 8, 2013)	54.9 per 100,000 population 245 heart disease deaths 28.7% of all deaths [All Deaths = 872]	179.1 age adjusted rate
HEART DIS	EASE PREVALENCE	
Adults ever told they had coronary heart disease : Adults ever told they had heart attack : (BRFSS 2011)	2.8% 3.1%	4.1% 4.4%
Have you ever been told by a doctor, nurse or other health professional that you have high blood cholesterol (HBC)? (BRFSS 2011)	33.1%	38.4%
SCREENING FOR HI	GH BLOOD CHOLESTEROL	
Adults had blood cholesterol checked within 5 years (BRFSS 2011)	61.9%	75.5%

10

Figure 1. Adults Ever Told They Had Angina/Coronary Heart Disease, Guam: 2007-2011



Source: BRFSS 2007 - 2011

#### Cancer Burden

From 2008 to 2011, there were 1,539 cancer cases registered in the Guam Cancer Registry (preliminary raw data as of October 17, 2013). Guam cancer deaths (571) accounted for 17.2% of all deaths (n= 3,317) for the period 2008 to 2011. The top four cancer priority areas are: 1) lung and bronchus, 2) breast, 3) prostate, and 4) colorectal. Table 7 below shows the cancer cases registered and deaths recorded for the period 2008 to 2011.

Table 7. Cancer Cases and Deaths, Guam: 2008 - 2011

ITEM YEAR					3-Year Annual Average	
	2008	2009	2010	2011	Total	(CY 2008-2010)
Cases	410	414	353	362	1,539	392
Deaths	134	140	141	156	571	138

Source: Guam Cancer Registry, University of Guam Cancer Research Center, and Guam Department of Public Health and Social Services, Guam Vital Statistics Office (preliminary data)

Although the cancer mortality rate in CY 2010 for Guam (133.6) was 22.7% lower than the U.S. rate (172.8), the 156 cancer related Guam deaths in CY 2011 were 13% higher than the previous three-year annual average (138). (Refer to Tables 7 and 8.)

Table 8. Cancer Incidence, Mortality, and Cancer Screening Data, Guam and U.S.: 2010-2011

ITEM	GUAM	U.S.	DIFFERENCE BETWEEN GUAM AND U.S.
CY 2010 Cancer Deaths Percent of All Deaths	141 16.5%	23.2%	-6.7%
Cancer Mortality Rate per 100,000 population, age adjusted (2010)	133.6	172.8	-22.7%
Cancer Prevalence Rate (BRFSS 2011)	1.8%	6.6%	-4.8%
Breast Cancer Screening:  Women aged 40+ who have had a mammogram within the past two years (BRFSS 2010)	64.4%	75.2%	-10.8%
Cervical Cancer Screening:  Women aged 18+ who have had a Pap test within the past three years (BRFSS 2010)	67.8%	81.3%	-13.5%
Prostate Cancer Screening:  Men aged 40+ who have had a PSA test within the past two years (BRFSS 2010)	28.3%	53.2%	-24.9%
Colorectal Cancer Screening:			
Adults aged 50+ who have had a blood stool test within the past two years (BRFSS 2010)	8.5%	17.2%	-8.7%
Adults aged 50+ who have ever had a sigmoldoscopy or colonoscopy (BRFSS 2010)	37.8%	65.2%	-27.4%

Source: Guam Department of Public Health and Social Services, Vital Statistics Office (preliminary data), US DHHS, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey 2010 and 2011, and US DHHS, National Vital Statistics Reports

NOTE: According to the U.S. Centers for Disease Prevention and Control, prevalence is defined as "the measured or estimated percentage of people -- weighted to population characteristics -- who actually had that attribute or disease during a specific year." The Merriam Webster dictionary defines it as "the percentage of a population that is affected with a particular disease at a given time."

Guam's cancer screening rates compared to the U.S. rates are significantly lower and need to be improved to detect cancer at its earliest stages. (Refer to Table 8.) In 2011, the cancer prevalence rate was 1.8% for Guam and 6.6% for the U.S. Survivorship rates are not available at this time.

<sup>&#</sup>x27;Source: BRFSS 2011 <sup>12</sup>Source: BRFSS 2011

Murphy SL, Xu JQ, Kochanek KD. Deaths: Final Data for 2010. National vital statistics reports; Vol 61, No. 4. Hyattsville, MD: National Center for Health Statistics. May 8, 2013.

GUAM

NO

DISEASES

NON-COMMUNICABLE

OF.

BURDEN

Cerebrovascular disease or stroke was the third leading cause of death on Guam accounting for 299 deaths from 2007 to 2011 and representing 7.3% of all deaths (n=4,095). In CY 2011, there were 53 stroke deaths which were 14.5% lower than the four-year annual average of 62 deaths. (Refer to Table 9.) However, when comparing the Guam stroke mortality rate of 71.6 per 100,000 population (age adjusted) with the U.S. rate (39.1), the Guam rate was 83.1% higher. (Refer to Table 10.)

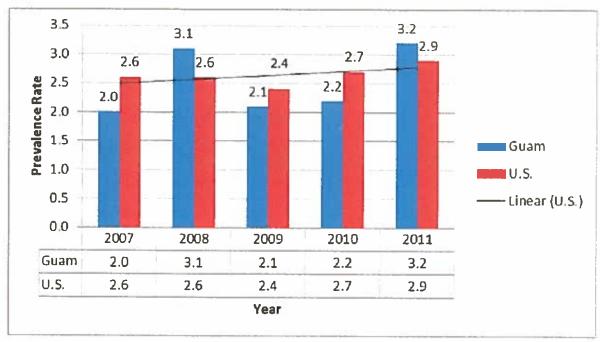
Table 9. Stroke Deaths, Guam: 2007 - 2011

ITEM			YE	AR			4-Year Annual Average
	2007	2008	2009	2010	2011	Total	(CY 2007-2010)
Stroke Deaths	55	66	59	66	53	299	62

Source: Guam Department of Public Health and Social Services, Vital Statistics Office (preliminary data)

In CY 2011, Guam's stroke prevalence rate (3.2%) was 0.3% higher than the U.S. rate of 2.9%, and over the five-year period was trending upward (BRFSS 2011). (Refer to Figure 2.) In contrast, when reviewing data on high blood pressure (which is one of the risk factors for stroke), the Guam rate was lower at 20.8% compared to the U.S. rate of 30.8%. (Refer to Table 10.) Conceivably the lower rate could be because fewer Guam adults were aware they had high blood pressure although no research has been done that supports this.

Figure 2. Stroke Prevalence Rates, Guam and U.S.: 2007-2011



Source: US DHHS, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey 2007 – 2011

Table 10. Cerebrovascular Disease/Stroke Prevalence and Mortality Data, Guam and U.S.: 2010-2011

ITEM	Guam	U.S.	Difference between Guam and U.S.
CY 2010 Stroke Deaths	66	***	+2.4%
Percent of All Deaths	7.7%	5.3%	12.770
CY 2010 Stroke Mortality Rate per 100,000 population, age adjusted15	71.6	39.1	+83.1%
Stroke Prevalence Rate: Adults ever told they had a stroke (BRFSS 2011)	3.2%	2.9%	+0.3%
Hypertension or High Blood Pressure:  Adults ever told they had high blood pressure (BRFSS 2011)	20.8%	30.8%	-10%
Adults taking medicine for high blood pressure control (BRFSS 2011)	69.8%	No data available.	

Source: Guam Department of Public Health and Social Services, Vital Statistics Office (preliminary data), US DHHS, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey 2009 and 2011, and US DHHS, National Vital Statistics Reports

#### Diabetes Burden

Diabetes continued to be one of the top ten leading causes of death on Guam for 2007 to 2011, and rose to the 4th leading cause of death in 2011. It accounted for 228 Guam deaths during this five-year period and represented 5.6% of all deaths (n = 4,095). In 2011 alone, there were 48 diabetes deaths which were 6.7% higher than the previous four-year annual average of 45 deaths. (Refer to Table 11.) Guam's adult diabetes prevalence rate of 9.9% was slightly higher than the U.S. rate of 9.5% (BRFSS 2011). In contrast, the Guam diabetes death rate was **1.8 times higher** than that of the U.S. (37.1 vs. 20.8). (Refer to Table 12.)

Table 11. Diabetes Deaths, Guam: 2007 - 2011

ITEM			YE		4-Year Annual Average		
	2007	2008	2009	2010	2011	Total	(CY 2007-2010)
Diabetes Deaths	43	47	49	41	48	228	45

Source: Guam Department of Public Health and Social Services, Vital Statistics Office (preliminary data)

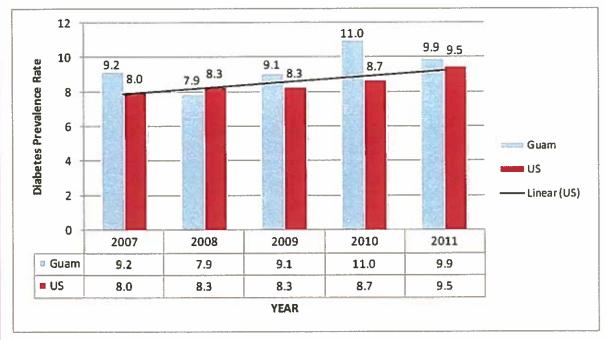
Table 12. Diabetes Mortality and Prevalence Data, Guam and U.S.: 2010-2011

ITEM	Guam	U.S.	Difference between Guam and U.S.
CY 2010 Diabetes Deaths Percent of All Deaths	41 4.8%	2.8%	+2.0%
CY 2010 Diabetes Mortality Rate per 100,000 population, age adjusted	37.1	20.8	+78.4%
Diabetes Prevalence Rate: Adults ever told they had a diabetes (BRFSS 2011)	9.9%	9,5%	+0.4%

Source: Guam Department of Public Health and Social Services, Vital Statistics Office (preliminary data), US DHHS, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey 2011 and US DHHS, National Vital Statistics Reports

With the exception of CY 2008, Guam's diabetes prevalence rates were consistently higher than the U.S. rate during this five-year period. (Refer to Figure 3.)

Figure 3. Diabetes Prevalence Rates, Guam and U.S.: 2007-2011



Source: US DHHS, Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance Survey 2007 – 2011

#### GUAM NON-COMMUNICABLE DISEASE STRATEGIC PLAN

#### Chronic Respiratory Diseases

Scant information is collected about asthma on Guam, although the BRFSS 2011 survey reported that 4.3% of Guam adults had been told that they currently have asthma, which is less than the 9.1% U.S. rate.

Other related mortality and prevalence data on lower respiratory disease or Chronic Obstructive Pulmonary Disease (COPD), for Guam and the U.S. are shown in Table 13. The Guam mortality and prevalence rates were all less than 44% of the U.S. rates.

Table 13. Chronic Obstructive Pulmonary Disease Mortality and Prevalence Data, Guam and US: 2007-2011

ITEM	YEAR						
	2007	2008	2009	2010	2011	Total	
COPD Deaths	21	29	27	24	22	123	
Percent of All Deaths	2.7%	3.7%	3.2%	2.8%	2.6%		
Mortality Rate per 100,000 population (age adjusted) – Guam	23.2	26.4	26.2	24.5	N/A		
Mortality Rate per 100,000 population (age adjusted) – U.S.	40.8	44.0	42.3	42.2	N/A		
COPD Prevalence Rate – Guam (BRFSS 2011)	N/A	N/A	N/A	N/A	3.7%		
COPD Prevalence Rate – U.S. (BRFSS 2011)	N/A	N/A	N/A	N/A	6.1%		

Source: Guam Department of Public Health and Social Services, Vital Statistics Office (preliminary data), and US DHHS, National Vital Statistics Reports. Note: N/A= not available

**ON GUAM** 

**BURDEN OF NON-COMMUNICABLE DISEASES** 

#### 5. GOALS

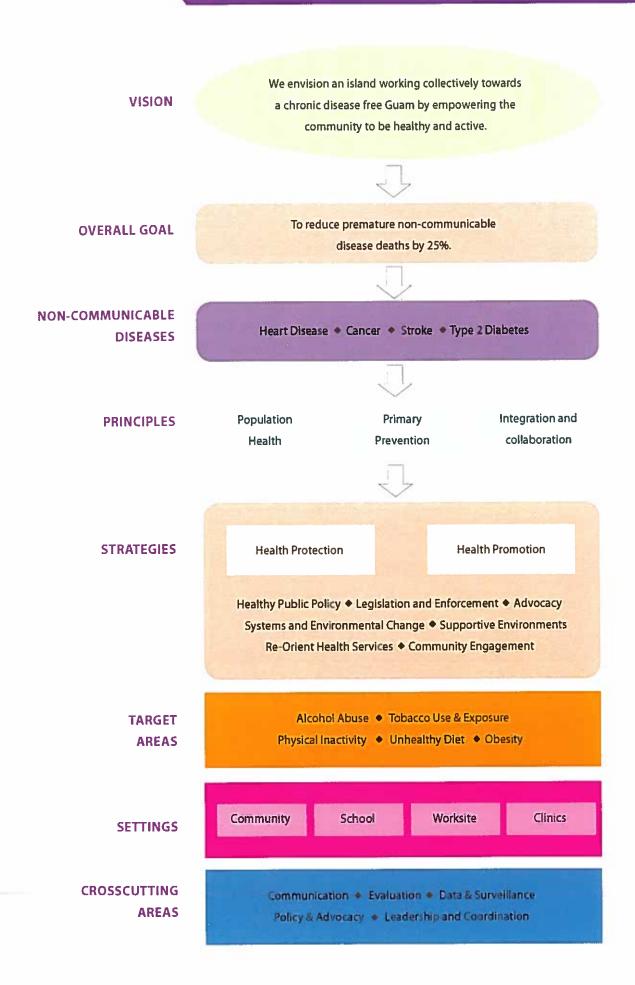
GOALS, OBJECTIVES, KEY STRATEGIES, SETTINGS

The overarching goal for the Guam NCD Plan is to reduce premature NCD deaths by 25% by the end of 2018.



The action team goals are aligned with the previous NCD plan and primarily focus on targeting modifiable risk factors. The NCD Action Plan includes (1) Tobacco Prevention and Control, (2) Alcohol Prevention and Control, (3) Physical Activity, (4) Nutrition and Obesity. The following five crosscutting areas are also addressed: (1) Administration and Coordination, (2) Data and Surveillance, (3) Policy and Advocacy, (4) Communications and (5) Evaluation.

Because both the Guam Diabetes Control and the Guam Comprehensive Cancer Control Coalitions are still in the process of finalizing their strategic plans for the upcoming five-year period, the specific parts of their plans that deal with clinical community linkages will be embedded in *Appendix 1* rather than fully incorporated into the NCD Plan at this time. Additionally, no strategic plan currently exists that addresses the problem of cardiovascular diseases despite being the top cause of deaths in Guam. Therefore, the Guam NCD Plan will insert preliminary activities to establish a foundation for seeking community support to reverse the current upward trend of cardiovascular deaths. (*Refer to Appendix 1.*)



**ACTION PLAN ACTIVITES** 



























**Cancer Education & Sports Activity** 

#### **MODIFIABLE RISK FACTORS**

#### **ALCOHOL PREVENTION AND CONTROL ACTION PLAN**

WORK GROUP:	ALCOHOL PREVENTION AND CONTROL						
GOAL:	To reduce the prevalence of alcohol use and abuse, and underage drinking by 10%.						
HEALTH INDICATORS:	Binge Drinking: % Adults having 5 or more drinks on one occasion, females having 4 or more drinks on one occasion (Source: BRFSS 2011-2012)						
	<u>Year 2011 2012 US Average (2011)</u> Overall Prevalence 18.3% 19.3% 21.2%						
OBJECTIVES:	Objective 1: To reduce adult and youth alcohol use rates by 10% by the end of 2018, by: creating and implementing media and social marketing advocacy campaigns; and implementing an alcohol server/seller intervention training for business establishments to promote healthy lifestyles and healthy choices among civilian and military communities.  Objective 2: To increase the number of policies and laws that directly or indirectly provide resources for prevention and/or create the environmental conditions that encourage healthy choices.  Objective 3: To increase the number of people assessed and referred to treatment and/or receive intervention by establishing a standardized protocol for clinicians to conduct alcohol screening assessments and referrals.						
STRATEGY(IES):	<ul> <li>To advocate for an increase in alcohol tax to directly fund alcohol prevention and control programs, and strengthen alcohol control laws and policies.</li> <li>To promote alcohol free public gatherings and support alcohol free parks and recreational facilities</li> <li>To provide training on 'responsible beverage service' (RBS) for employees that serve alcohol in bars, hotels, restaurants and other related establishments.</li> <li>To support the adoption of screening, brief intervention referral and treatment (SBIRT) protocols in clinics.</li> </ul>						

**CONTROL ACTION PLAN** 

**ALCOHOL PREVENTION AND** 

To reduce adult and youth alcohol use rates by 10% by the end of 2018, by: creating and implementing a media and social marketing advocacy campaign; and implementing an alcohol server/seller intervention training for business establishments to promote healthy lifestyles and healthy choices among civilian and military communities.

LEAD
ORGANIZATION(S)
& KEY MEMBER(S)
TO ASSIST WITH
ACTIVITY/TASK TARGET
AUDIENCE,
MESSAGE,
METHOD OF
COMMUNICATION TIMEFRAN RESOURCES RESOURCES **ACTIVITY** OUTCOME(5) FOR COMPLETIC WEHAVE NEEDED 1. Collaborate with partners Community Based Guam -Recruit Village mayors Increased 01/01/2014 to strengthen and support Behavioral organizations in Alcohol community 09/30/2018 organizations the One Nation Alcohol **Existing community** Health & private sectors establishments partnerships Prevention Social Marketing Wellness Guam Hotel & Rest. for One Nation partners **Established RBS** Association (GHRA) Campaign and Campaign, awareness on the Center **Funding needs** Guam Social Host Act and the trainers (GBHWC). Conduct **Guam Merchants RBS Trainings** Responsible Beverage Service Department Association quarterly (RBS)Trainings. of Youth subcommittee Business mtgs. \$400 per Affairs community (DYA), Youth Meetings year (4 mtgs. For Youth per year X \$100 Social Networking LIVE! Guam **Emails** per mtg.) (YFYLG), RB5 trainers. Mothers Against **Drunk Driving** (MADD), Just Say No Dance Crew (JSN), UOG Children's Healthy Living (CHL) program, Guam National Guard (GUNG) GBHWC, DYA, Existing 01/01/2014 -2. Support and promote Funding needs Youth, parents & Reduce alcothe One Nation Alcohol YFYLG, RBS trainers templates of families hol use and 09/30/2018 Village mayors abuse by 10% Prevention Social Marketing resources/ \$3,000.00 Campaign, awareness on Alcohol by the end of promotional for 380 Signs the Guam Social Host Act items, etc. establishments the 2018. (Social Host Awareness through Media GHRA Act) and Outreach Events that **GBHWC & Guam Merchants** Baseline: Association promote healthy living; and Adult heavy DYA (Financial (20 signs x 19 conduct RBS trainings with Department of partners) villages) drinking rate: business establishments. Parks & Recreation 7.5% (BRFSS (DPR) 2012); Adult \$3,000.00 Baseline: Adult heavy binge drinking Liberation Day drinking rate: 7.5% (BRFSS Village Town Hall rate: 19.3% promotional 2012); Adult binge drinking meetings (BRFSS 2012); resources rate: 19.3% (BRFSS 2012); Press Releases **Youth Current** Social Networking Youth Current Alcohol Use Alcohol Use \$2,000.00 media Rate: 24.7%; Rate: 24.7%; Youth Binge **Emails** (print & radio Drinking Rate: 13.6% Print ads Youth Binge ads) **Drinking Rate:** 13.6% Increased families celebrating liberation day alcohol free Increased number of servers/sellers certified in RBS. 3. Evaluate One Nation GBHWC, **GBHWC** NCD Data & Evaluation 01/01/2014 Community & **Alcohol Prevention Social** NCD Data & Surveillance Partners Meetings, Report on the 9/30/2018 Marketing Campaign and Surveillance Group Emails effectiveness the RBS Trainings for its Group of the effectiveness. campaigns

Objective 2 To increase the number of policies and laws that directly or indirectly provide resources for prevention and/or create the environmental conditions that encourage healthy choices.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Increase Alcohol Tax to directly fund alcohol prevention and control programs.  Current tax vs. Proposed tax Malted fermented beverages (Beer) per 12 oz. container \$0.07 increase to \$0.35 Vinous beverages (Wine) per gallon \$4.95 increase to \$6.93 Distilled spirits (Liquor) per gallon \$18.00 increase to \$25.20	YFYLG, GBHWC, DYA, JSN, MADD, Non Government Organization (NGO), Faith-based organizations	NCĐ Consortium Policy group	-Identify policy maker(s)	Policy makers Community (grassroots) Department of Revenue & Taxation (DRT  Public Hearings Village meetings Press releases Social Networks Email	Amount of tax being collected from Alcohol Sales and what portion directly goes to fund prevention programs. To increase tax by 40%.	01/01/2014- 09/30/2016
2. Research U.S. and the Micronesian area on their alcohol tax rates.	GBHWC	Internet access	N/A	U.S. States Micronesian Islands Research on-line	List of alcohol tax rates in the US and Micro- nesian area	01/01/2014- 12/10/2014
3. Advocate with legislature to provide resources for alcohol prevention and control programs and draft bill.	GBHWC DYA	NCD Consortium Policy group	-Identify policy maker(s)	Policy makers Letters Meetings	Identified prevention champion at legislature and bill intro- duced.	01/01/2014 - 9/30/2016
4. Work with partners to promote public awareness of bill and preparation for public hearing.	GBHWC		Funding Needs Print ads - \$1500.00	Prevention Partners  Community (grassroots)  Print ads Fliers	Bill signed into public law.	01/01/2014 - 9/30/2016
5. Strengthen local policies & laws, such as Alcohol free parks, Alcohol free events for Government of Guam, etc.	All group members	Existing laws	-Enforcement -Executive Order	Government of Guam employees & families Meetings Email	Increased number of alcohol free parks and activities for Government of Guam.	01/01/2014 - 9/30/2016

Objective 3

To increase the number of people assessed and referred to treatment and/or receive intervention by establishing a standardized protocol for clinicians to conduct alcohol screening assessments and referrals.

	ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(5)	TIMEFRAME FOR COMPLETION
	1. Implement Screening Brief Intervention Referral & Treatment (SBIRT) Pilot Project within GBHWC, Department of Public Health & Social Services (DPHSS) and private clinics.	GBHWC Drug & Alcohol Branch (D. Sabang)	SBIRT assessment tools	Memo of Understanding	GBHWC, DPHSS, private clinics	Increase proper diagnoses for treatment plans by 20% in the first year and increase by 5% every year after.	01/01/2014 – 09/30/2015
Name and Address of the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner, where the Owner, which is the Owner,	2. In collaboration with NCD Data & Surveillance group, collect and analyze data from assessment tools of SBIRT; determine effectiveness of program.	GBHWC Drug & Alcohol Branch (D. Sabang)	Completed SBIRT assess- ment tools	Memo of Understanding	GBHWC, NCD Data group Meetings Email	Results of number of referrals, assessments made	01/01/2014 – 09/30/2015

**ALCOHOL PREVENTION AND CONTROL ACTION PLAN** 

To reduce adult and youth alcohol use rates by 10% by the end of 2018, by: creating and implementing a media and social marketing advocacy campaign; and implementing an alcohol server/seller intervention training for business establishments to promote healthy lifestyles and healthy choices among civilian and military communities.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETIO
1. Collaborate with partners to strengthen and support the One Nation Alcohol Prevention Social Marketing Campaign, awareness on the Guam Social Host Act and the Responsible Beverage Service (RBS) Trainings.	Community Based organizations Existing community partners Established RBS trainers	Guam Behavioral Health & Wellness Center (GBHWC), Department of Youth Affairs (DYA), Youth For Youth LIVE! Guam (YFYLG), RBS trainers, Mothers Against Drunk Driving (MADD), Just Say No Dance Crew (JSN), UOG Children's Healthy Living (CHL) program, Guam National Guard (GUNG)	-Recruit organizations in private sectors  Funding needs Conduct quarterly subcommittee mtgs. \$400 per year (4 mtgs. per year X \$100 per mtg.)	Village mayors Alcohol establishments Guam Hotel & Rest. Association (GHRA) Guam Merchants Association Business community Meetings Social Networking Emails	Increased community partnerships for One Nation Campaign and RBS Trainings	01/01/2014 - 09/30/2018
2. Support and promote the One Nation Alcohol Prevention Social Marketing Campaign, awareness on the Guam Social Host Act Awareness through Media and Outreach Events that promote healthy living; and conduct RBS trainings with business establishments.  Baseline: Adult heavy drinking rate: 7.5% (BRFSS 2012); Adult binge drinking rate: 19.3% (BRFSS 2012); Youth Current Alcohol Use Rate: 24.7%; Youth Binge Drinking Rate: 13.6%	GBHWC, DYA, YFYŁG, RBS trainers	Existing templates of resources/ promotional items, etc.  GBHWC & DYA (Financial partners)	Funding needs \$3,000.00 for 380 Signs (Social Host Act )  (20 signs x 19 villages) \$3,000.00 Liberation Day promotional resources \$2,000.00 media (print & radio ads)	Youth, parents & families Village mayors Alcohol establishments GHRA Guam Merchants Association Department of Parks & Recreation (DPR) Village Town Hall meetings Press Releases Social Networking Emails Print ads	Reduce alco- hol use and abuse by 10% by the end of the 2018.  Baseline: Adult heavy drinking rate: 7.5% (BRFSS 2012); Adult binge drinking rate: 19.3% (BRFSS 2012); Youth Current Alcohol Use Rate: 24.7%; Youth Binge Drinking Rate: 13.6%  Increased families celebrating liberation day alcohol free Increased number of servers/sellers certified in RBS.	01/01/2014 - 09/30/2018
3. Evaluate One Nation Alcohol Prevention Social	GBHWC, NCD Data &	GBHWC	NCD Data & Surveillance	Community & Partners Meetings,	Evaluation Report on the	01/01/2014 - 9/30/2018

Objective 2
To increase the number of policies and laws that directly or indirectly provide resources for prevention and/or create the environmental conditions that encourage healthy choices.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Increase Alcohol Tax to directly fund alcohol prevention and control programs.  Current tax vs. Proposed tax  Malted fermented beverages (Beer) per 12 oz. container \$0.07 increase to \$0.35 Vinous beverages (Wine) per gallon \$4.95 increase to \$6.93 Distilled spirits (Liquor) per gallon \$18.00 increase to \$25.20	YFYLG, GBHWC, DYA, JSN, MADD, Non Government Organization (NGO), Faith-based organizations	NCD Consortium Policy group	-Identify policy maker(s)	Policy makers Community (grassroots) Department of Revenue & Taxation (DRT  Public Hearings Village meetings Press releases Social Networks Email	Amount of tax being collected from Alcohol Sales and what portion directly goes to fund prevention programs. To increase tax by 40%.	01/01/2014- 09/30/2016
2. Research U.S. and the Micronesian area on their alcohol tax rates.	GBHWC	Internet access	N/A	U.S. States Micronesian Islands Research on-line	List of alcohol tax rates in the US and Micro- nesian area	01/01/2014- 12/10/2014
3. Advocate with legislature to provide resources for alcohol prevention and control programs and draft bill.	GBHWC DYA	NCD Consortium Policy group	-Identify policy maker(s)	Policy makers  Letters Meetings	Identified prevention champion at legislature and bill intro- duced.	01/01/2014 - 9/30/2016
4. Work with partners to promote public awareness of bill and preparation for public hearing.	GBHWC		Funding Needs Print ads - \$1500.00	Prevention Partners  Community (grassroots)  Print ads Fliers	Bill signed into public law.	01/01/2014 - 9/30/2016
5. Strengthen local policies & laws, such as Alcohol free parks, Alcohol free events for Government of Guam, etc.	All group members	Existing laws	-Enforcement -Executive Order	Government of Guam employees & families Meetings Email	Increased number of alcohol free parks and activities for Government of Guam.	01/01/2014 – 9/30/2016

#### Objective 3

To increase the number of people assessed and referred to treatment and/or receive intervention by establishing a standardized protocol for clinicians to conduct alcohol screening assessments and referrals.

	ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
The second secon	1. Implement Screening Brief Intervention Referral & Treatment (SBIRT) Pilot Project within GBHWC, Department of Public Health & Social Services (DPHSS) and private clinics.	GBHWC Drug & Alcohol Branch (D. Sabang)	SBIRT assessment tools	Memo of Understanding	GBHWC, DPHSS, private clinics	Increase proper diagnoses for treatment plans by 20% in the first year and increase by 5% every year after.	01/01/2014 – 09/30/2015
Manual Property and Personal Property and Pe	2. In collaboration with NCD Data & Surveillance group, collect and analyze data from assessment tools of SBIRT; determine effectiveness of program.	GBHWC Drug & Alcohol Branch (D. Sabang)	Completed SBIRT assess- ment tools	Memo of Understanding	GBHWC, NCD Data group Meetings Email	Results of number of referrals, assessments made	01/01/2014 – 09/30/2015

#### **COMMUNITY GARDEN**







#### **NUTRITION AND OBESITY PREVENTION ACTION PLAN**

WORK GROUP:

**NUTRITION AND OBESITY PREVENTION** 

GOAL:

**OBESITY PREVENTION ACTION PLAN** 

**NUTRITION AND** 

To reduce obesity among youth and adults by 5% by 2018 through healthy eating by increasing the consumption of fruits and vegetables.

HEALTH INDICATORS:

% of Guam Adults Overweight (Source: BRFSS 2011)						
Year	2011	US Average 2011				
	36.6%	35.8%				
% of Guam Yout	h Overwe	eight (Source: YRBS 2011)				
<u>Year</u>	2011	US Average				
High School	16.5%	15.2%				
Middle School	26.6%	N/A				

% of Guam Ac	lults Obes	e (Source: BRFSS 2011)
<u>Year</u>	2011	US Average 2011
	27.4%	27.7%
% of Guam Yo	outh Obes	e (Source: YRBS 2011)
Year	2011	US Average
High School	15.4%	13.0%
Middle School	N/A	N/A

# % of Guam Adults who eat 5 servings of fruits/vegetables daily (Source: BRFSS 2009)Year2009US Average24.3%23.5%% of Guam Youth who ate vegetables less than 3x per day (Source: YRBS 2007)

 Year
 2007
 US Average

 High School
 87.3%
 86.8%

 Middle School
 26.6%
 N/A

% of Guam Youth, who ate fruit/100% fruit Juice less than 3x per day (Source: YRBS 2007)
Year 2007 US Average

 Year
 2007
 US Average

 High School
 84.4%
 78.7%

 Middle School
 26.6%
 N/A

Data on Elementary School Youth (Not Available)

Note: U.S. Average obtained from CDC websites for BRFSS (http://apps.nccd.cdc.gov/brfss/) and YRBS (http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf).

**OBJECTIVES:** 

Objective 1: Establish preliminary base line data on family, adult & youth fruit and vegetable daily consumption.

Objective 2: Increase fruits' and vegetables' availability and access to Villages & Families through market outlet initiatives.

Objective 3: Increase fruits and vegetable consumption, availability and access through: Home, Community, & School gardening initiatives.

Objective 4: Increase fruit and vegetable consumption and demand through education and public outreach initiatives.

STRATEGY(IES):

NCD partners (NGO's, faith based groups and Gov. Agencies) will work collaboratively to leverage our impact.

Goal: To reduce obesity among youth and adults by 5% by 2018 through healthy eating by increasing the consumption of fruits and vegetables. NCD partners (NGO's, faith based groups and Gov. Agencies) will work collaboratively on the following to leverage our impact.

Baseline:

% Adults overweight and obese

% High School Youth overweight and obese

Average servings of fruits and vegetables consumed by adults daily

Average servings of fruits and vegetables consumed by youths daily

Objective 1

Establish preliminary base line data on family, adult & youth fruit and vegetable daily consumption.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Identify current fruit & vegetable intake data in CDC BRFSS data set for Guam.	DPHSS	DPHSS leadership & Staff	All partners committing to working on these efforts	NCD professional partners and other health professionals on Guam	Provide Initial data for base- line knowl- edge on Fruit & Vegetable consumption.	By June 2014
2. Develop 2 standardized questions on 24 hour fruit & vegetable intake for use on partner workshop registration forms.	UOG CES/CHL, DPHSS, Island Girl Power (IGP), Serve Guam	UOG, DoAG, IGP, Serve Guam, and DPHSS all conduct workshops that have registration forms that these questions could be added to.	All partners committing to working on these efforts	NCD professional partners and other health professionals on Guam	Over NCD program pe- rlod will pro- vide informa- tion on adult fruit and vegetable consumption among target audiences.	Ongoing until December 2018
3. NCD partner programs where possible will collect food & activity journal/logs. (eg. CHL 900 2-8 year olds)	CHL for 2-8 yr. olds, others	CHL grant will be funding the 2-8 year old data collection	All partners committing to working on these efforts	NCD professional partners and other health professionals on Guam	Provide information on nutritional related behaviors on Guam.	Until December 2015

**NUTRITION AND OBESITY PREVENTION ACTION PLAN** 

Increase fruits' and vegetables' availability and access to Villages & Families through market outlet initiatives.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Work with NCD partners & mayors and community members to establish fruit and vegetable outlets; Night markets, produce stands and community supported agriculture (CSAs).	UOG CES, Farmers' Coop., village mayors, Farm to Table, IGP staff.  Some support still available in NCD Community Garden Grants, CHL will have mini-grant for targeted village groups. Both limited.	Coop has mission to promote these activities, Mayors are interested, UOG CHL can help in targeted villages.	Need seed funds (\$2,000 per effort) to start marketing effort.	NCD Community Garden Project Team Leaders and members  Communication via phone calls and email messages	Increase in Fruit and Vegetable consumption.  Increase fruit and vegetables supply, variety and ease of access to individuals and families in the communities where such activities occur.	By December 2015
2. Mini-grants hold potential for leveraging community based resources in the above efforts.	Some support still available in NCD Community Garden Grants, CHL will have mini-grant for targeted village groups. Both limited.	UOG CHL will have small pool that would be stronger if leveraged.	Need to identify a pool of funds for a minigrant program to encourage community partnerships and new innovative ideas (\$20,000 would be great). If NCD partners pooled resources might see leveraging.		Increasing accessible supplies should decrease price. With greater availability and variety and ease of access families should purchase and consume more fruits and vegetables. If increased supply decreases price more families will use fresh produce.	By December 2016

#### Objective 3

Increase fruits and vegetable consumption, availability and access through: Home, Community, & School gardening initiatives.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION	
Promote home gardens by leveraging existing gardening efforts.	UOG CES CHL & ANR, Island Girl Power, Serve Guam	Gardening curriculum developed by UOG CES CHL, Gardens funded by NCD, Gardens established by UOG CES and DOE, Many youth service volunteers trained by UOG CES CHL and Island Girl Power.	Volunteer's to be trained and their time to conduct outreach.	Mayors  Village Municipal Planning Councils  Village residents  GHURA  DOE School Board members  DOE School Superintendent, Principal, Teachers, and Students, Parents,	Increased fruit and vegetable use and consumption. Home gardens will have increased family vegetable supplies. Increased child familiarity with fruits and vegetables. Gardeners will have greater success with appropriate plant materials for their gardens. Community gardens will draw in many families who will/cannot garden in the isolation of their own homes thus increase family vegetable supply.	Continuous from January 2014 to January 2018	
2. Develop a Guam appropriate heirloom and other fruit and vegetable seed/plant materials exchange for NCD partners and communities.	Farmer's Coop, UOG CES ANR, DoAG, IGP, Farm to Table	Farmer's Coop	\$5,000 to purchase a wide variety of known seeds in bulk and packing materials to repackage, variety trials to test out heirloom varieties success on Guam.	Parent Teacher Organizations Meetings, presentations, email, and multi- media campaign		appropriate plant materials for their gardens.  Community gardens will draw in many families who will/cannot garden in the isolation	By December 2014
3. Establish true community gardens.	UOG CES CHL, Mayors offices, GHURA, Island Girl Power, Serve Guam	Mayor's offices that control land suitable for community gardens. Many organizations interested in helping.	S5-10,000 (1 to 2,000 each) to establish materials and supplies (mulch, fencing, fertilizer, irrigation lines, etc.) for (4) community gardens with committed minimum of ten individual plot holders.			By June 2015	

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETIO
4. Promote and establish school gardens to increase child familiarity with fruits and vegetables.	4. DOE, UOG CES CHL, 4H	4. DOE has funds to support. Curriculum from UOG designed to train teachers.	4. \$250 to \$500 per school garden that has at least 5 teachers committed to running, Trainers and volunteers to teach teachers how to garden and help start. Each school needs a small nursery (\$400) to generate plants for gardens and children to take home		School gardens with curriculum will expose children to vegetables and fruits on many levels and increase child willingness to consume the items.	4. By December 2015

Objective 4
Increase fruit and vegetable consumption and demand through education and public outreach initiatives.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Partners Co-Sponsor workshops on fruit and vegetable: cooking, preserving and nutritional benefits in communities/ villages.	1. UOG CES EFNEP & CHL, WIC, others	1. UOG CES has EFNEP program and Food preservation curriculum.	1. Pool of funds \$5,000 that can be allocated at a level of about 200-500 dollars per cooking workshop (canning, jellies, using local produce, healthy cooking, etc.).	Families  Island chefs association  Culinary Programs at Guam Community College (GCC)  Community Garden participants Families  Island chefs association  Culinary Programs at Guam Community College (GCC)  Community Garden participants	Community assessments show desire for cooking classes in the community. The focus on fruits and vegetables should increase peoples awareness.  Education on how to garden makes better and more successful gardeners.  Programs should promote more home gardens with increased fruit and vegetable consumption.	1. By December 2016
2. Develop a NCD partner supported Guam Gardener educational program. Hold program workshops at funded gardens.	2. UOG CES CHL, Island Girl Power, Farm to Table, DoAG, Serve Guam	2. UOG CES CHL has adult gardener training curriculum. Island girl power has rain garden and container curriculum with many existing gardens from earlier NCD mini-grant program.	2. Volunteers to become trained in curriculum that can deliver community education.			2. By June 2017

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
3. Develop online/ social media shared healthy eating/fruit and vegetable recipe book.	3. WIC, UOG CES CHL, EFNEP	3, NCD group interest in working in this area	3. \$5,000 to host competition community events to gather recipes and \$2,000 to do publication layout and web design.		Recipes and events to develop and select recipes can increase awareness and use for fruits and vegetables.  EFNEP teaches cooking, nutrition and promotes use of fruits and vegetables.	3. By June 2017
4. Promote enrollment in free Expanded Food and Nutrition Education Program (EFNEP) at partner sites	4. EFNEP and UOG CES CHL	4. Volunteers and NCD members to recruit groups of low income families to attend trainings.	4. Volunteers and NCD members to recruit groups of low income families to attend trainings.		It is free and just needs participants and venue for training.  Get island chefs promoting use of fruits and vegetables with 50% of selected item must be local produce criteria.	4. By Decembe 2017
5. Work with restaurants, GVB, and partners to sponsor/certify a "Guam Local Healthy Choice" menu item designation/certification.						5. By Decembe 2016

WORK GROUP:	NUTRITION AND OBESITY PREVENTION
GOAL:	To reduce hypertension and its associated risk factors among Guam adults.
HEALTH INDICATORS:	BASELINE:  1) The percentage of adults adding salt to their cooking and at the table (State-added BRFSS questions) Indicator: Pending BRFSS State-added questions  2) The percentage of adults on Guam who have been told they have high blood pressure (BRFSS) Indicator: 2011 - 20.8%
OBJEC <b>TIVES:</b>	Objective 1: By 2018, decrease the number of Guam residents reporting adding salt in cooking and at the table by 10%.
STRATEGY(IES):	<ol> <li>Establish population-based baseline data on added salt consumption in Guam and compare with Guam BRFSS hypertension trends.</li> <li>Educate the public on the risk of high salt diets and ways to reduce their salt intake.</li> <li>Establish local public/private partnerships to initiate interventions to reduce salt intake among Guam residents.</li> </ol>

Objective 1

By 2018, decrease the number of Guam residents reporting adding salt in cooking and at the table by 10%.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAMI FOR COMPLETIO
1-1: Develop State-added questions on the BRFSS on added salt consumption: 1) in cooking; and 2) at the table.	DPHSS/BRFSS, NCD Consortium Nutrition Team	SPC Grant, CDC and WHO technical and funding support	\$1,500 for two (2) state-added BRFSS questions	NCD Nutrition Consortium leaders, data collectors	Provide a population-based perspective on the consumption of added salt in Guarn and its correlation with hypertension survey data; Enable the measurement of added salt consumption trends and its correlation to hypertension; Determine the impact/efficacy of salt reduction interventions over time.	June 2014
2-1: Develop salt reduction PSAs and special health news spots on radio and television.	Guam NCD Consortium Nutrition and Communications/ Media Teams, Media outlets, UOG, Governor's Office and Legislature, NCD Consortium consultants	Guam NCD Consortium Nutrition Team, UOG, WIC Program, DPHSS MCH Program, Potential funding from WHO, SPC and other sources	\$5,000 for PSA development and air-time, Grant writers	General public	Public awareness of the dangers of high salt diets and ways to reduce their salt intake; Overall reduction of salt consumption within Guam's population.	March 2015
2-2: Develop and distribute low salt education videos (e.g., including reading labels, preparation and what types of foods to choose/ avoid).	Guam NCD Consortium Nutrition and Communications/ Media Teams, UOG, Governor's Office and Legislature, NCD Consortium consultants	Guam NCD Consortium Nutrition Team, UOG, WiC Program, DPHSS MCH Program, Potential funding from WHO, SPC and other sources	\$2,500 for education video development and air-time, Grant writerst	General public	Readily available instructional resources which make individuals and groups within Guam's community aware of practical ways to reduce their salt intake; Decline in Guam's rates of	March 2015
				Andrew products could the con-	hypertension and its related risk factors within the population.	

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
3-1: Work with grocers, restaurants and schools to promote, and make available to the public, low salt foods and/or meals.	Local retail grocers, Guam NCD Consortium Nutrition Team	Volunteers from Guam NCD Consortium Nutrition Team, UOG/ EFNEP, WIC, and DOE	Time commitment for selected members to meet and plan promotion strategies with grocers	General public, GHRA, Chamber of Commerce, business community	Strong coalition of key community partners to coordinate salt reduction efforts among Guam's population; Overall reduction of salt consumption within Guam's population.	May 2015
3-2: Remove salt shakers from tables at government institutional cafeterlas (e.g., schools – which can incorporate into Super Chef project and prisons).	DOE, GMHA, DOC, Naval Hospital, Guam NCD Consortium Nutrition Team	DOE Super Chef Project, volunteers	Lead person at each government run cafeteria, Lead person time commitment to follow up and maintain contact	Government agencies serving institutional meals	Removal of hypertension risk factor; Decline in Guam's rates of hypertension and its related risk factors within the population.	February 2015
3-3: Develop cookbook of local recipes for low salt meal preparation (link with local fruit and vegetable cookbook efforts).	Guam NCD Consortium Nutrition Team, UOG/EFNEP, WIC	Volunteer members from the Guam NCD Consortium Nutrition Team	Cookbook Committee member time commitment	Individuals on therapeutic low salt diets, General public	Empowering resource for Guam's residents to take charge of their own health; Guam's residents prepare meals with less salt.	April 2016

WORK GROUP:	NUTRITION AND OBESITY PREVENTION					
GOAL:	Reduce childhood obesity and improve overall infant health through increased breastfeeding (BF).					
HEALTH INDICATORS:	BASELINE:  1) The percent of WIC mothers who BF their infants at 6 months.  Annual Indicator: 2011 - 9.05%   2012 - 7.33%  2) The percent of mothers of newborns who initiate BF at Guam Memorial Hospital					
	Authority (GMHA) and continue to nurse their infants at discharge from the hospital.  Indicator: Unknown					
OBJECTIVES:	Objective 1: By 2018, increase the percentage of Guam infants who initiate breastfeeding at birth by 10% and who maintain breastfeeding until 6 months of age by 20%.					
STRATEGY(IES):	<ol> <li>Establish population-based baseline data on BF initiation and prevalence in Guam.</li> <li>Establish BF-friendly GMHA policies.</li> <li>Develop environmental interventions to assimilate BF into the "normal" Guam culture.</li> <li>Promote and educate the public on BF through the media, schools and community events.</li> <li>Develop BF resources for health professionals.</li> <li>Develop a BF support infrastructure in Guam.</li> </ol>					

NUTRITION AND OBESITY PREVENTION ACTION PLAN

By 2018, increase the percentage of Guam infants who initiate breastfeeding (BF) at birth by 10% and who maintain breastfeeding until 6 months of age by 20%.

ΑCTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
-1: Attain aggregate data om GMHA, Naval Hospital nd Birthing Center on the ercentage of infants who are if at discharge.	GMHA, Naval Hospital, Guam Birthing Center, UOG, DPHSS, Guam NCD Consortium Nutrition Team	Student volunteers, CWEPs to collect data	MOU with GMHA, Naval Hospital and Birthing Center to collect data	NCD Nutrition Consortium leaders, data collectors	Provide a wide population perspective on the initiation of BF in Guam; Enable the measurement of BF initiation trends over time to determine the impact of interventions.	June 2014
1-2: Develop State-added questions on the BRFSS for both BF initiation and prevalence at 6 months.	DPHSS (BRFSS PC IV), NCD Consortium Nutrition Team	SPC Grant, CDC to analyze	\$1,500 for two (2) state-added BRFSS questions	NCD Nutrition Consortium leaders, data collectors	Provide a wide, population-based perspective on the incidence and prevalence (at 6 months) of BF in Guam; Enable the measurement of BF incidence and prevalence trends over time to determine the impact of interventions.	December 2014
2-1: GMHA will continue to allow and encourage full term infants to "room in" with the mother.	GMHA, Guam NCD Consortium Nutrition Team	Guam NCD Consortium Nutrition Action Team, GMHA, Community BF partners		Guam NCD Consortium; Work with GMHA to formalize policy; Follow up on progress	Establish early maternal and infant bonding and a non-restrictive environment for BF-ondemand; Successful BF, more immunity from sickness, and less chance of obesity in childhood.	September 2014
2-2: GMHA will work with the NCD Consortium to establish policies to restrict baby bottles in newborn nursery for healthy, full-term infants.	GMHA, Guam NCD Consortium Nutrition Team	Guam NCD Consortium Nutrition Team, GMHA, Community BF partners		Guam NCD Consortium representatives to have periodic meetings with GMHA to develop and formalize policies	Establish BF from the time of birth as the first method of choice for infant feeding; Successful BF, more immunity from sickness, and less chance of obesity in childhood.	December 2014

ΑCTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
3-1: Develop and promote model policies for BF infants at moms' workplaces (government and private).	Guam NCD Consortium Nutrition Team, WIC Program, Governor's Office, Legislature, BF Advocacy Groups, and Other stakeholders and consultants	Guam NCD Consortium Nutrition Team, WIC Program, BF Advocacy Groups, and Other stakeholders and consultants	Multi-sectoral BF Coalition to promote, Government support (i.e., Governor and lawmakers)	Government workplaces, Guam private businesses	Pilots that demonstrate successful ways for working mothers to nurse their infants while continuing to work; Healthy families and a productive workplace.	June 2014 (review is ongoing)
3-2: Develop a "Working Moms" BF training on BF advantages, how to use breast pumps, new rights afforded by new legislation, encourage advocacy, etc.	Working group from public and private BF stakeholders and consultants	Guam NCD Consortium Nutrition Team, WIC Program, DPHSS Nursing/EPCC, BF Advocacy Groups, and Other stakeholders and consultants	Working Group time commitment	Guam's present and prospective BF moms	Informed working mothers on how they can work while continuing to nurse their infants; Mothers who are confident in their ability to successfully BF and continue to work.	June 2014
3-3: Develop and promote a social media cell phone application targeted at young mons for BF education, promotion and expanding BF support networks.	Working group from Guam NCD Consortium Nutrition Team, consisting of public and private BF stakeholders and consultant(s)	Guam NCD Consortium Nutrition Team, WIC Program, DPHSS Nursing, Focus Groups of young moms, BF Advocacy Groups, and Other stakeholders and consultants, explore for funding as a separate project	Est, \$10,000 (application development/ID existing public domain app and modify) and consultant working with a BF advisory Group from multi-sectoral stakeholders, Grant writers	Millennial and Generation X moms	Greater outreach to Millennial and Generation X moms with valuable resources for BF informa- tion, support networks and "online chat" communica- tion; Trust and acceptance of BF among the new, techni- cally savvy generations of young mothers.	September 2016
3-4: Develop cultural competency strategies to promote the social acceptance of BF (in both public and private venues) as a "cultural norm".	Public/ Private Working Committee of Stakeholders, Media outlets, Governor's Office and Legislature, NCD Consortium consultants	Guam NCD Consortium Nutrition Team, DPHSS Office of Minority Health (OMH), WIC Program, BF Coalition, Other public and private stakeholders and consultants	Working Group time commitment	All Guam citizens	Societal acceptance of Guam as a "breastfeeding culture"; Breastfeeding becomes the accepted first choice of infant feeding, complete with infrastructural supports.	August 2014

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION	ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION	
4-1: Develop BF promotion PSAs targeted to new and working moms (i.e., on Radio, TV, Movie Theaters).	Guam NCD Consortium Nutrition and Communications/ Media Teams, Media outlets, UOG, Governor's Office and Legislature, NCD Consortium consultants	Guam NCD Consortium Nutrition Team, UOG, WIC Program, DPHSS MCH Program, Potential funding from WHO, SPC and other sources	\$10,000 for PSA development and air-time, Grant writers	New and working BF moms	Developed and tested PSAs are aired through the media; Knowledge- able mothers and public on BF and its supporting resources.	March 2015	5-1: Develop an on-island mechanism to certify Lactation Specialists.	BF Coalition, WIC Program, GMHA, Naval Hospital, Birthing Center, UOG, DPHSS Nursing and MCH Programs	Qualified health professionals who can be certified	Key stakeholders/ members need to investigate	Health professionals whose discipline involves BF consultation	Ability to "home grow" Lactation Specialists; Increased number of Lactation Specialists on Guam.	December 2016	
4-2: Work with School Health Counselors, teachers and principals at the High Schools to offer BF education to teen moms.	Guam NCD Consortium Nutrition Team, WIC Program, Nursing/EPCC	WIC Health Educators (for WIC Program outreach), Selected members from Guam NCD Consortium Nutrition Team	Time commitments of volunteers to schedule and deliver education and outreach	Prospective and nursing teen BF moms	Teen mothers attend DPHSS's Early Prenatal Care Class (EPCC) and learn about BF; More teen mothers BF their infants.	Initiate in July 2014, then ongoing	5-2: Sponsor a Lactation Symposium for Health Care providers (bring in an Off-Island expert - e.g., Dr. Audrey Nailor from Welstart and/or 20-hour Lactation Course for Health Professionals).	BF Coalition, WIC Program, GMHA, Naval Hospital, Birthing Center, UOG, DPHSS Nursing and MCH Programs	Current on- island Health Professionals to serve as speakers	\$7,500 for speakers, venue and symposium materials	Health professionals whose discipline involves BF consultation	Avail high level health professionals of continuing education; Greater and more active advocacy for BF among higher level health	February 2015	
4-3: Work with Mayor's Offices to disseminate, to their respective villages, BF education materials, as well as information on scheduled BF-	Volunteer Guam NCD Consortium Nutrition Team Members	Presently existing and later- developed BF education	Time commitments from NCD Consortium and BF Coalition	Prospective BF moms in specific villages	Mayor's Offices can inform their communi- tles about BF and BF events:	Initiate March 2014 and ongoing						professionals such as physicians and nurses.		
related community events.		materials	members to distribute and monitor		Knowledgeable mothers and well-attended BF events.	mothers and well-attended		6-1: Re-establish BF Coalition and include strong advocates from key areas/departments in both private and public sectors.	BF Coalition, WIC, GMHA, Naval Hospital, Birthing Center, UOG, DPHSS Nursing and MCH	Potential members	Working Group to organize, Leaders and a time commitment	All advocates of BF, both public and private	Establishment of a multi- sectoral organization to lead the	April 2014
4-4: Hold an annual island - wide celebration event for National Breastfeeding Week/ Month.	Guam NCD Consortium Nutrition and Communications/ Media Teams, BF Coalition, Media outlets, UOG, Governor's Office and Legislature, NCD Consortium consultants	BF Coalition to solicit donations, BF supporters to promote and participate	Est. \$1,000 for materials, refreshments, venue, and displays	All supporters of BF	Guam residents are informed about BF through participation in, and media coverage of, celebration activities and the testimonials of women who have	May 2015		Programs, and Other BF Advocacy Groups and stakeholders		of members to address coalition activities		community in promoting BF to the general public, the media and lawmakers, A strong and influential social and political voice in the community which promotes BF.		
A.S. Character Of any state	Dr. C. divi . Mr.				successfully breastfed; Greater cultural/social acceptance of BF as a normal societal practice.		6-2: Establish and maintain a BF hotline (Coordinated by Guam's BF Coalition).	BF Coalition, Guam NCD Consortium Nutrition Team, WIC	Volunteers with BF experience, WIC BF Peer Counseling Program	Working Group to organize,	Guam's BF moms	Available 24/7 resource to assist BF mothers with their questions; Nursing mothers receive the BF help they need.	May 2014	
4-5: Develop BF newsletter which includes, among other things, the sharing of incidence/prevalence data, success stories and new island BF initiatives.	BF Coalition, WIC Program, GMHA, Naval Hospital, Birthing Center, UOG, DPHSS, and Nursing and MCH Programs	BF Coalition to solicit donations, BF supporters to promote and participate,	Est. \$1,000 for materials, Lead editor, writers	practicing and potential BF moms	Establish a written, periodic publication which reports on various BF trend data, events, and BF success stories in the community; Informed public on BF in Guam.	September 2015	6-3: Establish and maintain a Guam breast milk bank.	GMHA, Naval Hospital, Birthing Center, Private Physicians, WIC, DPHSS Nursing and MCH	Interested health professionals and BF Advocates	Key stakeholders/ members need to investigate	Guam mothers with special needs infants	Avail moms of alternative sources of breast milk for "special needs" infants; Nursing mothers who need human breast milk, but cannot produce it themselves, can receive it.	August 2017	

#### PHYSICAL ACTIVITY ACTION PLAN

**WORK GROUP:** PHYSICAL ACTIVITY GOAL: To increase physical activity among youth and adults in Guam by 10%. % of Adults who participated in 150 minutes of Aerobic Physical Activity per week (Source: BRFSS 2011) HEALTH Year 2011 US Average 2011 INDICATORS: 48.2% 51.6% % of Guam students physically active at least 60 minutes per day on 5 or more days (Source: YRBS 2011) <u>Year 2011</u> US Average 2011 High School 37.4% 49.5% Middle School 36.9% N/A % of children in Guam who engage in 60 minutes or more of physical activity daily (Source: YRBS 2011) Year 2011 US Average 2011 High school 21.8% 28.7% Middle School 23.1% N/A % of Guam Students who attended PE daily in school on an average week (Source: YRBS 2011) Year\_\_\_\_2011 US Average 2011 High school 8.9% 31.5% Middle School 48.2% N/A % of Guam Students who did NOT go to PE classes in an average week (Source: YRBS 2011) Year 2011 US Average 2011 High school 58.7% 48.2% Data on Elementary School Youth (Not Available) % of GovGuam employees asked: Are you involved in a worksite wellness program (Source: Guam Comprehensive Wellness Program Employee Interest Survey) Year 2010: YES: 23.4% NO: 76.6% Note: U.S. Average obtained from CDC websites for BRFSS (http://apps.nccd.cdc.gov/brfss/) and YRBS (http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf). **OBJECTIVES:** Objective 1: By 2018, increase the percentage of Guam adults participating in 150 minutes or more of aerobic physical activity per week from 48% to 56%. Objective 2: By 2018, increase the percentage of Guam high school students physically active at least 60 minutes per day on 5 or more days from 37.4% to 47.4%. Objective 3: By 2018, increase the percentage of children in Guam who engage in 60 minutes (1 hour) or more of physical activity daily by 10%. Objective 4: By 2013, increase the percentage of government of Guam employees involved in the worksite wellness program from 23.4% to 60%. STRATEGY(IES): To continue Safe Paths to School, revitalize parks and playgrounds, and improve infrastructure that promotes physical activity. To advocate for increased Physical Education requirements in schools. To advocate for and insure compliance in the inclusion of bike paths and sidewalks on Guam road construction and reconstruction. To develop and implement programs and activities which support the Worksite Wellness Program.

Objective 1 By 2018, increase the percentage of Guam adults participating in 150 minutes or more of aerobic physical activity per week from 48% to 56%.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
A. Continue Safe Paths to School. Assess and develop children friendly paths and walkways within at least a mile from elementary and middle schools. Provide for sustainable maintenance of paths, sidewalks, and trails. Provide for signage. Provide for educational campaign. Facilitate Neighborhood Watch Program.	Hagatna Restoration and Redevelopment Authority (HRRA) (J. Santos), Island Girl Power (IGP), Island Beautification Task Force  I Bike (S. Redman), Get Healthy Guam Coalition (GHGC) (R. Veksler); Guam Sunshine Rotary (GSR) Club (B. Van Boxtel) & Dr. Oshiro	Manpower and Volunteers; Trainings and Meeting Venues			Implement yearly education campaigns on the benefits of spay and neuter programs in the community.	01/01/2014 - 12/31/2018
B. Continue to promote Disc Golf Clinics. Continue implementing island-wide disc golf clinics. Continue to promote clinics in schools. Work with Mayor's Office and partners for mechanism to store and utilize Disc Golf clinic equipments and supplies.	Ushiro					
C. Support Spay and Neuter Program Awareness Campaign.  Notes: Mandates: Ch 13, 16 GCA; § 54105.						
(Bicycle Lanes and Pedestrian Ways) Chapter 54, 5 GCA; Section 213, 23 USC (Transportation Alternative Program) FHWA			10.0		d dear of the control	
Possible resources: http:// www.saferoutesinfo.org/ Guam may be eligible under the SAFETAU-LU & MAP 21 Federal Highway Administration Program for Safe Routes to School						Applications of the state of th

PHYSICAL ACTIVITY ACTION PLAN

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
D. Continue Neighborhood Park Revitalization. Prioritize neighborhood parks for clean-up.Identify shortfalls and usability status.  Support "built- environment" projects such as building, maintaining or revitalizing infrastructures to incorporate physical activity courses, obstacle courses, and the like.  Notes: Mandates: Consumer Safety Council's Public Playground Safety Handbook as standard  Ch 77, 21 GCA	HRRA (J. Santos), Island Beautification Task Force, Mayors Council of Guam  Department of Parks and Recreation (DPR) (J. Mendioła), DPHSS (L. Alam)		Funding, Lack of adequate number of manpower and volunteers	Community  All Types: Radio, TV, Print, Social Media	By 2018, 50% parks of all parks in Guam will have been revitalized and or adopted.  By 2018, at least 1 physical activity infrastructure has been built, revitalized and/or maintained.	Throughout Project Period
E. Address initiatives for Bicycle Lanes, Routes and Paths.  1. As necessary, review, develop and implement policies to ensure viable bicycle lanes, routes and/or paths.  2. Collaborate with partners and stakeholders to provide and install applicable signage; and painting services.  3. Conduct community education to increase awareness on bicycle issues to include motorist courtesy, safety and other priority topics.  Mandates: § 54105. Bicycle Lanes and Pedestrian Ways. Chapter 54, 5 GCA USDOT FHWA Manual on Uniform Traffic Control Devices for Streets & Highways Ch 27, 16 GCA	l Bike (T. Renfro); GSR (B. Van Boxtel)	Manpower and Volunteers; Trainings and Meeting Venues	Funding	Legislature, Community All Types: Radio, TV, Print, Social Media Targeted: Policy- Maker Communication Tools (1 page summaries, etc.)	By 2018, bicycle lanes, routes and paths will have been successfully developed, created and maintained; and used by community members.	Throughout Project Period

Objective 2
By 2018, increase the percentage of Guam high school students physically active at least 60 minutes per day on 5 or more days from 37.4% to 47.4%.

ACTIVITY  & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK    ACTIVITY   RESOURCES   RESOURCES   MESSAGE, METHOD OF COMMUNICATION   METHOD OF COMPLETION	more days from 37.4% to 47	-470.					
Initiatives:  A. Increase and improve the implementation of Physical Physical Education (PE) Activities in Guam schools 1) Modify section 715(12), 10CG to indicate that physical education be required 60 minutes per school day, 5 days a week in DOE Schools.  • Ensure that schoolchildren meet current recommendations found in the Physical Activity Guidelines for Americans.  • Develop and implement policies and programs that allow student requirements for PE to be satisfied by DOE Accredited Sports. Organizations and Federation (paddling, volleyball, basseball, etc.) and to include privatized sports/ physical activity classes or trainings—Aerobics, gym, taekwondo.  • Revisit current policies on high school PE requirements to ensure that students are getting recommended levels of	ACTIVITY	ORGANIZATION(S)  & KEY MEMBER(S)  TO ASSIST WITH			AUDIENCE, MESSAGE, METHOD OF	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Notes: §715(12), 1 GCA & §3207, Chapter 3, Article 2, 17 GCA	Initiatives:  A. Increase and improve the implementation of Physical Education (PE) Activities in Guam schools 1) Modify section 715(12), 1 GCA to indicate that physical education be required 60 minutes per school day, 5 days a week in DOE Schools. • Ensure that schoolchildren meet current recommendations found in the Physical Activity Guidelines for Americans. • Develop and implement policies and programs that allow student requirements for PE to be satisfied by DOE Accredited Sports. Organizations and Federation (paddling, volleyball, baseball, etc.) and to include privatized sports/ physical activity classes or trainings— Aerobics, gym, taekwondo. • Revisit current policies on high school PE requirements to ensure that students are getting recommended levels of physical activity.  Notes: \$715(12), 1 GCA & §3207,	on Physical Fitness & Sports (GCPF&S) (Atty. P. Wolff); GHGC (R. Veksler); DPHSS (L. Alam); GSR (B. Van Boxtel); DOE (M. Sablan); UOG-CHL (L and D. Camacho); CCC/NCD Policy & Advocacy (C.	and Volunteers; Trainings and Meeting Venues; PE Teacher Curriculum;	Funding	Parents, Educators, DOE Staff and Management Legislature  All Types: Radio, TV, Print, Social Media  Targeted: Policy- Maker Communication Tools (1 pager summaries, etc.); DOE Teachers and Management: Information tools (newsletters, short study summaries, etc.) Parents and students: Flyers, Letters; PTO	classes will have been mandated to all Guam schools to run for 60 minutes a day, at least 3 to 5 days a	Throughout Project Period

PHYSICAL ACTIVITY ACTION PLAN

PHYSICAL ACTIVITY ACTION PLAN

By 2018, increase the percentage of children in Guam who engage in 60 minutes (1 hour) or more of physical activity daily by 10%.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH	RESOURCES WE HAVE
A. Provide support to update DOE's Nutrition and Physical Fitness Policy.  1.) Develop, implement and sustain mechanisms that ensure DOE Schools are given incentives/ rewards for meeting physical activity standards and requirements based on federal guidelines (School Incentive Program).  2.) Development of healthier school environments through the promotion of nutrition and physical activities (Healthier US School Challenge).  3.) Improve After School Program activities by working with various organizations from private, non for profit and public to develop, implement and evaluate health programs and activities  4.) Revisit current policies on elementary and middle school PE requirements to ensure that students are getting recommended levels of physical activity  5.) NCD Prevention Curriculum  - Continue to support the Cancer Prevention Curriculum (Healthy Kids 4 Life Program Implementation)  - Develop and finalize a Heart Disease and Stroke Prevention Curriculum that could be used in local schools  - Work with partners to develop and finalize a Diabetes Prevention Curriculum  - Work with partners to develop and finalize an Asthma Prevention Curriculum  Note 1: Curriculum that is developed will be evidenced-based ensuring that products go through a Curriculum Development process to include, but not limited to, needs		Manpower and Volunteers; Resources that provide examples of evidence based practices to ensure success

#### **Objective 4**

By 2018, increase the percentage of government of Guam employees involved in the worksite wellness program from 23.4% to 60.0%.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE
Worksite Wellness Program (WWP)  1. Develop and implement programs and activities that support, improve, and sustain the WWP.	DPHSS (P. Luces, L. Alam, and A. Silverio), WWP Steering Committee, Health Coaches	Health coaches; WWP Steering Committee Executive Order; Policy
<ul> <li>a. Assist in planning and coordinating and/or provide technical assistance in implementing health screening activities to employees to ensure compliance with policies.</li> </ul>		
<ul> <li>b. Plan, implement and evaluate support programs such as: 1) Departhalon events, 2) 2K/5K runs, 3)</li> <li>Biggest Loser challenges, 4) Pop Up video, etc.</li> </ul>		
<ul> <li>c. Provide education and awareness activities such as NCD 101 classes, cooking class, tobacco cessation counseling, etc.</li> </ul>		
<ul> <li>d. Evaluate the overall WWP and assist in providing technical assistance to agencies that aim to evaluate their program.</li> </ul>		
e. Ensure a viable WWP Steering Committee that 1) improves current policies, 2) supports and promotes govt. worksite wellness programs, 3) spearheads government wide support activities and strategies (i.e., award events), and 4) assists in the evaluation of agency programs.		

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMU- NICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Funding	DOE Management; School Board School Children PTO; parents Communicate via school system: letters to parents, flyers, newsletters; Social Media	By 2018, a signed MOU and an approved COA Standards & Guidelines Plan will have been incorporated within the Nutrition & Physical Fitness Wellness Policy  By 2018, at least 10 Guam DOE schools will have been rewarded due to meeting physical activity standards and requirements.  By 2018, at least 10 Guam DOE Schools will have become certified as Bronze, Silver, Gold, and/or Gold of Distinction Schools by meeting HUSSC criteria.  By 2018, at least 3 after school programs will have been developed, implemented and evaluated by partners.  By 2018, DOE elementary and middle school policies on PE will support recommendation from the US Physical Activity Guidelines for Americans.  By 2013, at least 1 curriculum will have been finalized and evaluated.	Throughout Project Period

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMU- NICATION	OUTCOME(5)	TIMEFRAME FOR COMPLETION
Sustainable funding source for incentives, health screening supplies and equipment, and evaluation resources.	Government of Guam employees	By 2018, 60% (or more) of GovGuam employees will have participated in the WWP.	01/01/2014 – 12/31/2018

#### **TOBACCO PREVENTION AND CONTROL ACTION PLAN**

WORK GROUP:	TOBACCO PREVENTION AND CONTROL							
GOAL:	Reduce tobacco use on Guam to 18% by 2018.							
HEALTH INDICATORS:	Current Smoking - Adults (Source: BRFSS 2011-2012)           Year         2011         2012         US Average (2011)           Overall Prevalence         30.5%         25.8%         21.2%							
	Current Smoking – High School Youth (Source: YRBS 2011) Year 2011 2012 US Average (2011) Overall Prevalence 21.9% N/A 18.1%							
	<u>Smokeless Tobacco Use – Adults (Source: BRFSS 2009-2010)</u> <u>Year 2009 2010</u> 4.2% 6.9%							
	Smokeless Tobacco Use – High School (Source: YRBS 2001- 2011)           Year         2001         2011           6.3%         14%							
	Note: U.S. Average obtained from CDC websites for BRFSS (http://apps.nccd.cdc.gov/brfss/) and YRBS (http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf).							
OBJECTIVES:	Objective 1: To increase taxes by 100% on all tobacco products by December 2018.  Objective 2: To remove all exceptions in tobacco control mandate (10 GCA Chap. 90) by December 2018.  Objective 3: To include Brief Tobacco Intervention (BTI), Cessation resources and American Cancer Society's Fresh Start Cessation trained facilitator as part of Worksite Wellness Program by January 2015.							
STRATEGY(IES):	<ul> <li>Use guidance from PL30-80 success.</li> <li>Engage community organizations.</li> <li>Seek support of Director (DPHSS) to approach Governor to amend EO 2012-07.</li> </ul>							

#### Objective 1

To increase taxes by 100% on all tobacco products by December 2018.

Baseline data: Current tax rate for cigarettes: \$3.00 per pack (if increased will bring up to \$6.00 per pack)

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAM FOR COMPLETIC
1. Identify champions for policy change and collaborate with advocacy groups to develop legislation/bill.	Guam NCD Consortium Tobacco Control Team Guam Cancer Care American Cancer Society	People/ Partners Existing legislation	Venue Photocopying of documents  Partners and community support  Technical assistance from ACS	Legislators Governor & Lt. Governor GMA, GMS, & GNA Village Mayors ACS & Guam Cancer Care Youth Groups, other private & non-profit organizations Presentations Print and Electronic Media Campaigns, Social Networking, On- line messaging NCD Consortium meetings and outreach events	Increased knowledge about and support for tax increase.  Tax bill increased.  Tobacco prices increased.	December 2018

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
2. Develop educational campaign tool kit.	Guam NCD Consortium Tobacco Control and Communications/ Media Teams  DPHSS BCH	People/ Partners	Culturally and linguistically appropriate services (CLAS) compliant resources: interpretation & translation services	Legislators Governor & Lt. Governor Governor's Cabinet GMA, GMS, & GNA Community-At- Large Print and Electronic Media Campaigns Social Networking, On- line messaging NCD Consortium meetings & outreach events.	Legislators Governor & Lt. Governor Governor's Cabinet GMA, GMS, & GNA Community- At-Large Print and Electronic Media Campaigns Social Networking, On-line messaging NCD Consortium meetings & outreach events.	December 2015
3. Advocate to legislative champions to increase tobacco tax.	Guam NCD Consortium Tobacco Control Team NCD Consortium & partner advocacy groups	People/ Partners	Venue Duplication of documents Partners and community support Technical assistance from ACS Legislative support – meetings with senators Cancer survivors for advocacy & media support	Legislators Governor & Lt. Governor Governor's Cabinet Presentations & meetings	Increased knowledge about and support for tax increase. Tax bill passed into law. Tobacco prices increased	December 2018

Objective 2
To remove all exceptions in tobacco control mandate (10 GCA Chap. 90) by December 2018.

Baseline data: 4 potential exceptions to be addressed (Bars, Open outdoor patio areas, Offices that are exclusive to only smokers, Hotel

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Identify champions for policy change and collaborate with advocacy groups to develop legislation/bill.	Guam NCD Consortium Tobacco Control Team Guam Cancer Care	People/ Partners Existing legislation	GHRA & private org buy-ins Survey on hotel's smoking policies & number of smoking rooms (GVB & GHRA) Counter marketing	Legislators Governor & Lt. Governor GMA, GMS & GNA GVB & GHRA Village Mayors ACS & Guam Cancer Care Youth groups & other private / non-profit orgs Presentations Print and Electronic Media Campaigns, Social Networking, On- line messaging NCD Consortium meetings and outreach events	Increased knowledge about and support for 100% smokefree law. Natasha Tobacco Control Act amended.	December 2018

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
2. Develop educational campaign tool kit.	Guam NCD Consortium Tobacco Control and Communications/ MediaTeams  DPHSS BCHS	People/ Partners	CLAS compliant resources: interpretation & translation services t	Legislators Governor & Lt. Governor GMA, GMS & GNA GVB & GHRA Village Mayors AC5 & Guam Cancer Care Youth groups & other private / non- profit orgs Presentations Print and Electronic Media Campaigns, Social Networking, On-line messaging NCD Consortium meetings and outreach events	Increased knowledge about and support for 100% smokefree law. Natasha Tobacco Control Act amended.	December 2015
3. Advocate to legislative champions to remove exceptions in tobacco control mandates.	NCD Consortium  Partner advocacy groups	People/ Partners	Venue Duplication of documents Partners and community support Technical assistance from ACS Legislative support = meetings with senators Cancer survivors for advocacy & media support	Legislators Governor & Lt. Governor Governor's Cabinet Presentations & meetings	Increased knowledge about and support for 100% smokefree law. Natasha Tobacco Control Act amended.	December 2018

To include Brief Tobacco Intervention (BTI) and Cessation and ACS Freshstart program (online facilitator training) resources as part of Worksite Wellness Program by January 2015.

Baseline data: 0 of 55 potential worksite wellness programs that have incorporated BTI/ACS Freshstart in their program.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Collaborate with Governor's Office to amend EO 2012-07 to include required BTI & Cessation resources at all Government of Guam agencies through training of all Health Coaches and HR Staff.	DPHSS PEACE UOG	People/ Partners Technical- Assistance and Capacity- Building Providers	BTI Skills Certification training Cessation resources (ACS Freshstart Program)	Governor & Lt. Governor's Cabinet Agency Health Coaches HR Staff Presentations Print and Electronic Media Campaigns, Social Networking, On-line messaging NCD Consortium meetings and outreach events	Health Coaches: Increased knowledge and cessation skills of health coaches.  Workers/ Employees: Increased awareness of cessation resources; Increased quit attempts.	January 2015
2. Promote Tobacco Free message, 1-800-QUIT-NOW and website: www.qultnow.net/guam resource though media campaigns.	DPHSS NCD Tobacco Control Team	People/ Partners		Community-At- Large  Print and Electronic Media Campaigns  On-line messaging & Social Networking  NCD Consortium meetings and outreach events	Health Coaches: Increased knowledge and cessation skills of health coaches.  Workers/ Employees: Increased awareness of cessation resources; Increased quit attempts.	01/01/2014- 12/31/2018

#### **CROSSCUTTING SUPPORTIVE AREAS**

#### **ADMINISTRATION AND COORDINATION ACTION PLAN**

WORK GROUP:	ADMINISTRATION AND COORDINATION								
GOAL:	To strengthen and integrate NCD coordination and collaboration by involving all stakeholders in supporting NCD initiatives.								
OBJECTIVES:	Objective 1: By the end of 2014, to formulate a "commit to action" statement for executive concurrence among policy makers.  Objective 2: By the end of 2015, to strengthen the NCD Program by establishing an NCD steering committee and formalizing the organization, structure and operating agreement of the NCD Consortium.  Objective 3: By the end of 2016, to identify sustainable funding support for the NCD Program within the Department of Public Health and Social Services to coordinate and integrate the approaches to NCDs for Guam.								
STRATEGY(IES):	<ul> <li>To encourage policy, system and environmental changes that support healthy behavior.</li> <li>To foster a coordinated approach to NCDs that leverages resources and maximizes impact on health outcomes.</li> </ul>								

Objective 1

By the end of 2014, to formulate a "commit to action" statement for executive concurrence and support among policy makers.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Formulate a "Commit to Action" statement detailing the actions necessary to reduce the burden of NCDs on Guam.	NCD Consortium leadership	NCD action team members	Political will and community support	Executive Leaders, Legislature, GMA, GMS, GNA, Other Health organizations, community organizations, Schools, health providers	"Commit to Action" statement receives endorsement and support.	January 2015
2. Obtain commitment from community stakeholders, policymakers, health providers, and community members to work together to reverse the rise of premature NCD deaths on Guam.	NCD Consortium leadership	NCD action team members	Political will and community support	Executive Leaders, Legislature, GMA, GMS, GNA, Other Health organizations, community organizations, Schools, health providers	Commitment is shown by signing "Commit to Action" statement and pledging support for its implementation and follow through.	01/01/2014- 12/31/2018
3. Work with the NCD Communications Team to conduct a campaign to support the movement.	NCD Communications Team	NCD Consortium membership	Members with marketing backgrounds to volunteer to lead the movement.	Executive Leaders, Legislature, GMA, GMS, GNA, Other Health organizations, community organizations, Schools, health providers	Campaign is formulated and successfully carried out.	Jan Dec. 2014

By the end of 2015, to strengthen the NCD Program by establishing an NCD steering committee and formalizing the organization, structure and operating agreement of the NCD Consortium.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Prepare NCD     Consortium     organizational     guidelines and have     input and buy-in     from NCD members     and groups.	NCD Tobacco Control Tearn	NCD action team members	Program Coordinator to prepare guidelines and obtain feedback from members.	NCD members and groups Meetings and presentations	Guidelines prepared and endorsed by NCD members.	Jan. – Dec. 2014
2. Review NCD membership and determine what organizations should be recruited to join and strengthen the NCD Consortium partnership.	NCD Tobacco Control Team	NCD ad hoc committee established to conduct review	Program Coordinator to survey and obtain feedback from members.	NCD members and groups  Meetings and presentations with potential recruits.	New members/ groups invited to join the NCD Consortium	Jan. – Dec. 2015

#### **Objective 3**

By the end of 2016, to identify sustainable funding support for the NCD Program within the Department of Public Health and Social Services to coordinate and integrate the approaches to NCDs for Guam.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Recruit NCD Coordinator.	DPHSS BCHS	CDC Funding	Sustainable local funding support	DPHSS & Legislative support Meetings	Full time Program Coordinator hired and fully supported.	Mar. 2014 – Sept. 2015
2. Coordinate with DPHSS Director, Governor's Office, and Legislative Health Committee Chair to insure that NCD is afforded high priority.	DPHSS BCHS	CDC Funding	Sustainable local funding support	DPHSS & Legislative support Meetings	NCD Programs are fully integrated with funding support and resources.	01/01/2014 - 12/31/2018
3. Continue to support the NCD Consortium ongoing meetings and activities.	DPHSS BCHS	CDC, WHO, and Other Federal Funding	Sustainable local funding support	DPHSS & Legislative support Meetings	NCD Programs are fully integrated with funding support and resources.	01/01/2014 - 12/31/2018

#### **COMMUNICATIONS ACTION PLAN**

WORK GROUP:

OR JECTIVES:

NCD COMMUNICATIONS

GOAL:

To motivate individuals, families and Guam's community- at- large (businesses, non-profit organizations, non-government agencies, faith-based organizations and other community based-organizations) to live healthier lifestyles by promoting and supporting the Non-Communicable Disease (NCD) vision, mission, values, and activities using culturally relevant and targeted health promotions.

Objective 1: By 2018, create, implement, and evaluate Guam's NCD Media Campaign (Live HEALTHY Guam!) and raise awareness of the cost, benefits, and negative consequences of unhealthy eating, physical inactivity, alcohol and tobacco use and abuse in relation to NCDs among

**Expected behavioral change:** Increased awareness of the negative consequences of unhealthy eating, physical inactivity, tobacco and alcohol use and abuse and it's relation to chronic diseases, increased physically active youth and adults, greater consumption of local fruits and vegetables contributing to a decline in non-communicable diseases on Guam by 2018.

Objective 2: By 2018, the community will take action and support NCD's action teams in promoting public/ community advocacy for policies on non-communicable disease prevention, control and social environmental changes.

**Expected behavioral change:** Increased public awareness of the burden of non-communicable diseases would motivate the community at large to participate in public advocacy and passage of laws that support non-communicable disease prevention, control and social environmental changes.

**Objective 3:** By 2018, promote and increase the participation of employees and Government of Guam agencies involved in Guam's worksite wellness programs.

**Expected behavioral change:** Increased employees and agencies that participate in the Worksite Wellness Programs.

Objective 4: By 2018, develop and implement communication strategies into a systematic and coordinated process within DPHSS and the NCD Consortium to provide regular communication to the community-at-large on the prevention and control of noncommunicable diseases and related risk factors on Guam.

**Expected behavioral change:** Increased percentage (up to 70%) of staff, public health programs, partners and stakeholders implementing a systematic and comprehensive communication strategies for non-communicable disease prevention and health promotion from 2014 (baseline) to 2018.

STRATEGY(IES):

- Develop multi-systemic, data-driven, culturally relevant and community-driven strategies to influence behavior change and motivate healthful lifestyles using the Health Communication Process and World Health Organization's Communication-for- Behavioral- Impact (COMBI) Frameworks. Guide the NCD Action teams in the development, implementation and evaluation of Guam's NCD social marketing media campaign, LIVE Healthy Guam! (LHG!).
- 2. Develop, support, and implement branding of the LIVE Healthy Guam! Social Marketing Campaign with subthemes "What makes you Active and Attractive" Campaign, "One Nation Alcohol Prevention- RBS Social Marketing Campaign", Nutrition Mass Media Campaign, "Tobacco Control" Mass Media Campaign using strategic health promotion traditional (print, radio, TV -cooking show, outdoor- indoor theater advertising, promotional items, cultural and sporting events (Youth for Youth LIVE! Guam 5K, other 5Ks, community events/ZUMBA\* promotions), public relations, and non-traditional media approaches (social networking, texting campaign, email alerts, out of the box educational campaign materials. etc.).
- Pretest which Social Networking sites would be most effective at reaching specific target audiences
  using both qualitative (focus groups) and quantitative (monkey survey) research strategies. The results
  would be used to develop and refine campaign messages for campaign effectiveness.
- 4. Hire a Media Coordinator to develop, maintain and monitor LHG Social Networking Campaign. (i.e. LHG! Website, Facebook, Instagram (#livehealthyguam), YouTube, Tumblr, Blogs and YoLoSpace). The coordinator will also encourage partners to cross promote NCD program activities on partner websites. (Funding sources need to be identified).
- Continue community outreach presentations to reach underserved populations, faith based communities and other hard to reach populations.
- 6. Develop multi-lingual educational resources on NCD prevention, control and program activities for
- 7. Develop Internal and External protocols of communication for non-communicable disease prevention information dissemination to the general public.

Objective 1

**COMMUNICATIONS ACTION PLAN** 

By 2018, create, implement and evaluate Guam's NCD Media Campaign (Live HEALTHY Guam!) and raise awareness of the cost, benefits, and negative consequences of unhealthy eating, physical inactivity, alcohol and tobacco use and abuse in relation to non-communicable diseases among youth and adults.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Conduct a coster contest in middle chools/ SA Lip Dub contest in high chool. College cholarship to levelop and upport the HG! Media ampaign ubthemes, Active and attractive couth contest in high chool. College cholarship to levelop and upport the HG! Media ampaign ubthemes, Active and attractive couth contest in the Nation levelop land in the malls and will be displayed at one of he malls and will be used for print adsund the NCD 2015 Calendar. Healthy ocal recipes will be included in the calendar also. PSA will be used in the mass media campaign.]	NCD Communications/ Media Action Team (CMAT) Support: DPHSS staff		Prizes or scholarships for poster and PSA middle/high school poster winners.	Middle/high school youth Public and private schools	Development of culturally relevant and Community and youth driven PSAs.	Poster/PSA contest: April 2014 2015 Calendar Dec. 2014
evelop LIVE! Ithy Guam (LHG) Iding Guidelines nedia imple- Itation and mes- e consistency to le NCD stake- Iters and com- Iters and com- Iters artners.	NCD CMAT Support: DPHSS staff		Printing of LHG! Brochures (multi-lingual brochures- Chamorro, Chuukese, Filipino etc.), media kit and other resources. Multilingual translators are needed.	Hard and electronic copies distributed to NCD members, stakeholders, community partners	Message clarity and brand consistency. NCD groups promote awareness of NCD's mission, vision and values through unified messaging.	Mar. 2014

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
3. Work with Community partners, UOG interns, and DPHSS to develop & implement LHG! Mass Media Campaign using Public Relations, traditional and non-traditional media channels to raise awareness of the cost, benefits, and negative consequences of unhealthy eating, physical inactivity, alcohol and tobacco use and abuse in relation to specific non-communicable diseases for specific audiences.	NCD CMAT Community Outreach/Agency Presentations done by all NCD Teams (Stakeholder's bureau)	Funding sources for Media Imple- mentation	Part time Media Coordinator for media monitoring. UOG Student Interns	Youth ages 11-17 yrs. old, Adults with NCDs, and high risk populations identified by NCD teams using traditional and non- traditional media approaches Underserve/hard to reach populations- Community Outreach Presentations Key leaders, Government, & Businesses, Media- Agency Presentations	Promote healthy food choices vs. unhealthy foods. Promote the reduction of salt intake, food security and breastfeeding. Promote Safe Paths to School, I-bicycle, and other physical activities programs. Change perceptions of Alcohol & Tobacco Use. Highlight consequences of selling alcohol to minors at bars/restaurants. Promote availability of 1-800-QUT-NOW quit-line. Highlight negative consequences of tobacco use and secondhand smoke.	01/10/2014 - 12/31/2018
4. Develop NCD Newsletter.	NCD CMAT Support: DPHSS		Printing of Newsletter	NCD Members Local, federal, regional partners Businesses, Media	The community will have an increase awareness of NCD activities.	01/01/2014 – 12/31/2018
5. Promote partnerships with private businesses i.e., telephone company, hotel restaurant assn.) and develop a smartphone texting campaign in collaboration with Guam's "Go local Campaign."	Presentations done by NCD teams Support: DPHSS			Youth- promotes NCD prevention through a social networking and texting campaign. Businesses-promote NCD prevention through healthier menus, recipes	Youth will increase consumption of local fruits and vegetables and engage in more physical activity. Businesses will offer healthier food choices.	01/01/2014 – 12/31/2018

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ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAMI FOR COMPLETIO
6. Evaluate and Monitor the campaign by collecting data through Action Team Activity Reports, process- outcome evaluations of Mass media campaign evaluation reports, focus groups, web analytics, unique hits and number of members on social networks (Facebook, Instagram, etc.) and monitoring rates of NCDs on Guam from 2014-2018.	DPHSS All NCD teams Data and Surveillance Team		Action Team Activity Reports to be compiled. NCD Media team to work with evalua- tor to create questions to be added to BRFSS survey and a short survey to be used by all NCD ac- tion groups that mea- sures both exposure and impact of the media campaigns. These can be collected at all outreach presenta- tions and table displays and will be a require- ment of the NCD brand guidelines. Media Coordinator to collect monthly web and Social network reports (Web Analytics).	Federal funders Local funders	Increase funding support to sustain NCD media prevention and control campaign activities.  Baseline for social networking campaign evaluation that can be monitored throughout the years.	01/01/2014 - 12/31/2018

By 2018, support the NCD action teams in promoting public/community advocacy for policies on non-communicable disease prevention, control and social environmental changes.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Organize Stakeholder Bureau to conduct community-wide presentations to communicate the cost and burden of NCDs on Guam and empower decision makers to support legislations for NCD prevention policy, systems and environment changes.	All NCD team leaders Support Staff: DPHSS		Media coordinator to develop PR materials.	Policy Decision-Makers/Legislators/Mayors, Partners/Stakeholders (Private Non-Profits [PNP], Non Government Organizations [NGO], Community Based Organizations [CBO]), Businesses, Youth organizations, Media will be informed through community presentations.	Increased public awareness of the burden of non-communicable diseases would motivate public advocacy and passage of laws that support NCD prevention, control and social environmental changes.	01/01/2014 12/31/2018

Objective 3
By 2018, promote and increase the participation of employees and Government of Guam agencies involved in Guam's worksite wellness programs.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Promote group physical activities and Government of Guam worksite wellness program through social networks (Facebook, Instagram, email alerts, new employee orientation, posters, Walk the Miles Challenge Activity etc.).	NCD CMAT Support Staff: Health Coaches	Current wellness programs	Media coordinator to manage and update website and Social networks.	Government of Guam Agencies and employees	Increased agency participation and attendance in the Government of Guam Employee Wellness Program.	01/01/2014 – 12/31/2018

Objective 4
By 2018, develop and implement communication strategies into a systematic and coordinated process within DPHSS and the NCD Consortium to provide regular communication to the community-at-large on the prevention and control of non-communicable diseases and related risk factors on Guam.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Develop Internal and External Protocols of communication for NCD prevention information dissemination.	NCD CMAT Support Staff: DPHSS		Partner Activity Reports to be compiled to track communications	DPHSS- Employees NCD Consortium members, Community Partners, State and Regional Partners/ Funders, Emergency Management Teams	Increase the percent of staff, public health programs, partners and stakeholders implementing systematic and comprehensive communication strategies for non-communicable disease prevention and health promotion.	01/01/2014 12/31/2018

#### **DATA AND SURVEILLANCE ACTION PLAN**

WORK GROUP:	NCD COMMUNICATIONS
GOAL:	To support data collection efforts and the sharing of data that can document the progress in preventing NCDs on Guam.
OBJECTIVES:	Objective 1: By the end of 2014, the NCD Data and Surveillance Action Team will have established an infrastructure of NCD/SNAPO health indicators with at least 2 indicators per action team/work group  Objective 2: By 2018, the community will take action and support NCD's action teams in promoting public/ community advocacy for policies on non-communicable disease prevention, control and social environmental changes.
STRATEGY(IES):	<ul> <li>To establish a NCD data network that is responsive to the data needs of the NCD Action Teams.</li> <li>To have a fully functioning NCD data and surveillance system that can provide data to support planning, programming, and policy decisions related to NCDs for the island.</li> </ul>

#### Objective 1

DATA AND SURVEILLANCE ACTION PLAN

By the end of 2014, the NCD Data and Surveillance Action Team will have established an infrastructure of NCD/SNAPO health indicators with at least 2 indicators per action team/work group.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Identify Government/ Non-Government Organizations with health information and network with them to collect NCD related data.	DPHSS BRFSS Program (A. Uncangco)	DPHSS Com- munity Health Assessment (CHA) Plan, State Epide- miological Outcomes Workgroup (SEOW)	CHA External Stakehold- ers Directory List; State Epidemiolo- gy Outcomes Directory List	Government (i.e., DPHSS, DOE), NGOs, UOG Cancer Research Center (CRC), State	NCD data will be identified and collected from reliable sources.	01/31/2014
2. Meet and collaborate with NCD workgroups to identify emerging areas and select strategies to address them.	Bureau of Plans and Statistics (BPS) (M. Guerrero) & DOE (P. Nededog)	DPHSS Com- munity Health Assessment (CHA) Plan, State Epide- miological Outcomes Workgroup (SEOW)	DPHSS CHA Plan Health Indicators, BRFSS, YRBS, Cancer Registry, Cancer Facts & Figures, Top 10 Leading Causes of Death (Office of Vital Statistics, DPHSS), GYTS	Facebook; 7*-10" tablet (notebook, iPad, etc.); membership to Cloud	Based on priority areas identified, data collected will support and align with each workgroup's goals and objectives.	01/01/2014 – 12/31/2018
3. Create an inventory of NCD data related sources.	DPHSS BRFSS Program (A. Uncangco)	DPHSS CHA Plan, BRFSS, YRBS, Cancer Registry, Cancer Facts & Figures, Top 10 Leading Causes of Death (Office of Vital Statistics, DPHSS), GYTS	CHA Health Indicator List	NCD Consortium, general public, health service providers, health organizations	A list of available NCD datasets and information on populations(s) at highest risk of NCD burdens will be documented and readily available.	02/28/2014

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
4. Recruit additional members to the Data and Surveillance Action Team. Invite health insurance companies to the monthly NCD meetings.  - Organize a speaker group.  - Provide a membership application on the website.	All members	Existing coalitions (Guam Comprehensive Cancer Coalition-Data and Research Action Team, Diabetes Coalition, To- bacco Control partnerships)	Roster of organizations affiliated with NCD data sources; utilize NCD Communication Consultant; correspondences to health insurance companies; form a speaker group to present NCD information and awareness; invite health insurance companies to participate in the NCD monthly meetings; membership application	Government, NGOs, UOG CRC, NCD Consortium, Military organization	Increased membership.	01/01/2014 - 12/31/2018

#### Objective 2

By the end of 2014, the NCD Data and Surveillance Action Team will have established an infrastructure of NCD/SNAPO health indicators with at least 2 indicators per action team/work group.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Support the Live Healthy Guam NCD web page by regularly updating the Data and Surveillance segment.	UOG CHL (D. Dominguez and A. Yamanaka)	Samples of existing websites (i.e., DPHSS live- healthyguam, Bureau of Statistics Plan- ning, Guam Behavioral Health and Wellness Center)	Live Healthy Guam website; Coordinator to manage and update website; Inventory list of NCD/ SNAPO health indicators	Community-at-large	Data collected will be shared and accessible to the community, organizations, stakeholders, policy makers, and interested parties who are involved in reducing NCDs on Guam.	12/31/2018

# POLICY AND ADVOCACY ACTION PLAN

#### **POLICY AND ADVOCACY ACTION PLAN**

WORK GROUP: POLICY AND ADVOCACY  Advocate for social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and environmental policies that are conducive to healthy lifestyles for a better quality and the social and the s	
Advocate for social and environmental policies that are conducive to healthy lifestyles for a better q	
by targeting a minimum of five policy or advocacy measures annually.	petter quality of life
PERFORMANCE Baseline: An average of four NCD related policies were passed annually during 28th to 31st Guam Lindicators: sessions.	Guam Legislative
Objective 1: By 2018 to formalize and strengthen the Policy and Advocacy Action Team.  Objective 2: By 2018 the Policy and Advocacy Action Team will have supported all NCD action teams in their efforts to develop policy, systems, and environmental (PSE) related cha  Objective: To facilitate and sustain stakeholders in addressing NCDs.	
• To monitor the landscape and attend relevant gatherings, and provide comments, guidance and to the NCD Consortium.	ance and feedback

#### **Objective 1**

By the end of 2014, the NCD Data and Surveillance Action Team will have established an infrastructure of NCD/SNAPO health indicators with at least 2 indicators per action team/work group.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Define Roles.	P&A Action Team	n/a	DPHSS partners, time and commitment from team members	Chair and Members Meetings/Email	Written roles	Initial plan by September 2014
2. Define Parameters.	P&A Action Team	n/a	Same as above.	Chair and Members Meetings/Email	Written parameters for operation of the Team.	Initial plan by September 2014
3. Develop policies of interest/priority to the P&A Action Team.	P&A Action Team	n/a	Time and commitment from members	Chair and Members Meetings/Email	Documented priority policies agreed upon by members.	Initial plan by September 2014

#### Objective 2

By 2018 the Policy and Advocacy Action Team will have supported all NCD action teams in their efforts to develop policy, systems, and environmental (PSE) related changes.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Ensure accessibility of P&A Action Team members to the NCD Consortium Action Teams through attendance at Consortium meetings.	P&A Action Team	n/a	Time and commitment from members	Chair and Members Meetings	Attendance records.	Initial plan by September 2014
2. Provide support to other NCD Consortium Action Teams that have identified policy as a priority. Support may include guidance and advice, technical support, facilitation, policy scans, communication, collaboration, networking, and so on.	P&A Action Team  NCD Action Teams	n/a	Legal experts Grant writing experts Bill writing experts Health Insurance expert	Chair and Members  Meetings/Email/ face to face	Documented support to the teams.	Initial plan by September 2014

#### Objective 3

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. Engage policy makers. -Secure commitments. -Build relationships. -Be included/ embedded in decision making.	Chair and Members	n/a	Time and commitment from members and policymakers	Government officials, policy makers, decision groups. Meetings/ Email/ office visits/ attendance at outside meetings and round tables, and so on.	Evidence of support	01/01/2014 - 12/31/2018
1. Networking: - Include stakeholders in NCD meetings Include stakeholders in Policy and Advocacy Action Team.	Chair and Members	n/a	Time and commitment from members	Government officials, policy makers, decision groups. Meetings/Email/office visits/attendance at outside meetings and round tables, and so on.	Attendance rosters	01/01/2013 - 12/31/2018

#### 7. Evaluation

#### Introduction

**EVALUATION** 

Mindful of its duty to regularly measure and account for progress in implementing the Guam NCD Strategic Action Plan 2014-2018, the NCD Consortium developed the evaluation approach as part of the strategic planning process. Evaluation is seen as part of an iterative quality assurance process, which will guide the NCD Consortium throughout the implementation stage. Thus, the NCD Strategic Plan evaluation will consist of two major components (Figure E-1):

- 1. Formative evaluation occurring throughout the implementation phase, with a focus on assessing the process of implementing the strategic plan.
- Summative evaluation occurring at each milestone during implementation, and at the end of the implementation phase, with a focus on the outcomes and impact of the strategic plan.

Figure E-1. Schematic Diagram of Guam Evaluation Process



Assessment is anticipated to occur throughout implementation. Formative evaluation will measure outputs, which result directly from the strategic plan activities. Summative assessments will measure outcomes, which align with the plan objectives, and impact, which align with the plan goals (Figure E-2). The Consortium recognizes that some impact measures, such as declines in NCD morbidity and mortality, will not occur immediately, and will become apparent only after a sufficient amount of time has transpired post-implementation. However, there are interim impact measures, such as reductions in obesity and hypertension prevalence that may demonstrate measurable change within the 5-year life span of the plan. These have been identified in the relevant sections of the evaluation plan.

Figure E-2. Alignment of Evaluation Measures with the NCD Strategic Plan Components



#### Methodologic Approach

The evaluation component of the Guam NCD Strategic Action Plan was developed through a consultative and participatory process. A draft was created for each of the NCD working groups. Group members reviewed the draft and provided feedback, leading to the final revised version. The evaluation plan is composed of separate sections representing each of the working groups. For each section, a table outlines the outputs, outcomes, and impact for each objective. A second table identifies the assessment instrument and frequency of data collection for every outcome identified.

For the process evaluation, it is recommended that:

- Record keeping by each of the implementing teams should be done CONSISTENTLY, using STANDARDIZED formats.
   For example, attendance sheets for the various activities under the NCD Strategic Plan should utilize one format that captures the key demographic variables of sex, ethnicity/race, age, and village.
- All records should ideally be stored systematically in a central location.
- Implementing teams responsible for the conduct of activities should be responsible for their own record keeping, but a central data manager should ideally be identified to oversee collection and storage of records, and data entry and data management of the information obtained from the records.
- Records should be maintained for each activity, with reporting to the Consortium general membership done on a quarterly or semi-annual basis.
- A copy of all materials developed under this strategic plan, such as curricula, training tools, media and educational
  products, should be kept on file.
- QUALITATIVE data should also be collected as needed, through key informant interviews, focus groups, participant observation, Photovoice, etc.
- The use of technology to enhance data collection is strongly recommended. For example, online surveys using tools such as Survey Monkey are encouraged.
- Process evaluation should note MILESTONES and CRITICAL EVENTS. Milestones are significant points that occur as expected throughout the implementation process, such as, for example, when critical stakeholders come on board, when Memoranda of Agreements (MOAs) or Memoranda of Understanding (MOUs) are finalized, or when projects are completely implemented. Critical events are unexpected events, either positive or negative, that will affect the implementation of the strategic plan. Examples of critical events are changes in membership or leadership of the consortium, policy changes that have an effect on NCD prevention and control.
- Finally, it is recommended that members' satisfaction with the Consortium and strength of collaboration be
  periodically assessed using the appropriate assessment instruments.

Table E-1 lists some of the key process indicators that should be measured throughout the life of the grant. Table E-2 enumerates the different assessment instruments that should be applied to the various types of strategic plan activities.

Table E-1. Process Indicators

GUAM NON-COMMUNICABLE DISEASE STRATEGIC PLAN

CHART 5	PROCESS INDICATOR					
General measures	Composition, and growth/change in membership.					
	Partnerships developed for NCD prevention and control.					
	How satisfied are Consortium members with the progress of the NCD Consortium?					
	How effective are the collaboration mechanisms of the Consortium?					
	Percentage of NCD Strategic Plan activities that have been funded.					
	Percentage of NCD Strategic Plan activities and interventions that have been implemented.					
Target population (for	What was the target population?					
each activity)	What was the actual population reached?					
	What would explain the discrepancy between projected and actual participation?					
	What effect did this discrepancy have on the activity/intervention?					
Activities and	What activities and interventions were planned?					
Interventions	What activities and interventions were actually carried out?					
	What planned activities and interventions were not implemented?					
	What activities and interventions were implemented outside of the strategic plan?					
	What reasons explain these discrepancies?					
	What impact did these discrepancies have on the ability to achieve the desired outcomes?					
Participant Feedback	How did participants evaluate the activity/intervention?					
	What feedback can be used to improve the activity/intervention?					
Lessons Learned	What were the obstacles and barriers to implementing the planned activities/interventions?					
	What were the promoting and supporting factors that facilitated the implementation of planned activities interventions?					
	How can plan implementation be improved in the future?					

Table E-2. Assessment Instruments for Various NCD Strategic Plan Activities

ACTIVITY	ASSESSMENT INSTRUMENT/S
All activities	<ol> <li>Attendance sheet – participant name, institution, position, address, email, phone number, sex, age, race ethnicity, village</li> <li>Participant evaluation form – administered at the end of the activity</li> </ol>
Educational activities	<ol> <li>Attendance sheet – participant name, institution, position, address, email, phone number, sex, age, race ethnicity, village</li> <li>Participant evaluation form – administered at the end of the activity</li> <li>Participant knowledge assessment questionnaire – administered before and after the activity</li> </ol>
Training/skills certification	<ol> <li>Attendance sheet – participant name, institution, position, address, email, phone number, sex, age, racel ethnicity, village</li> <li>Participant evaluation form – administered at the end of the activity</li> <li>Participant knowledge assessment questionnaire – administered before and after the activity</li> <li>Skills confidence assessment questionnaire – administered before and after the activity</li> </ol>
Advocacy activities	<ol> <li>Attendance sheet – participant name, institution, position, address, email, phone number, sex, age, race ethnicity, village</li> <li>Participant evaluation form – administered at the end of the activity</li> <li>Participant knowledge assessment questionnaire – administered before and after the activity</li> <li>Participant attitudes assessment questionnaire – administered before and after the activity</li> </ol>
Lessons Learned	What were the obstacles and barriers to implementing the planned activities/interventions?  What were the promoting and supporting factors that facilitated the implementation of planned activities interventions?  How can plan implementation be improved in the future?

## **Modifiable Risk Factors**

# ALCOHOL PREVENTION AND CONTROL

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
dyouth alcohol use rates 10% by the end of 2018, by	<ul> <li>RBS trainings held</li> <li>Servers/sellers certified in RBS increased</li> <li>Families celebrating liberation day alcohol free increased</li> <li>One Nation and RBS training evaluated</li> </ul>	skills in preventing underage drinking and adult binge drinking  Increased community support for alcohol-	Decreased underage drinking prevalence to 22.3% or lower  Decreased binge drinking rate (Adults: 17.4%; Youth: 12.3%)  Decreased adult heavy drinking rate to 6.75% or lower  Decreased alcohol-related motor vehicle accidents  Alcohol-free events are the norm
Objective 2: To increase the number of policies and laws that directly or indirectly provide resources for prevention and/or create the environmental conditions that encourage healthy choices.  Baseline: P.L. 30-65 requires 15% of public beaches/parks to be alcohol free.	<ul> <li>Draft proposed alcohol tax created increasing alcohol taxes by 40% and earmarking funds for alcohol prevention</li> <li>Prevention champion identified</li> <li>Advocacy materials created</li> <li>Advocacy opportunities utilized</li> </ul>	Bill passed into law, increasing taxes on alcohol products  A portion of alcohol tax revenues earmarked for alcohol prevention  P.L. 30-65 expanded to cover 50% of public beaches/parks	<ul> <li>Sustainable funding for alcohol prevention established</li> <li>Decreased alcohol consumption</li> <li>Alcohol-free events and public places become the norm</li> </ul>
Objective 3: To increase the number of people assessed and referred to treatment and/or receive intervention by establishing a standardized protocol for clinicians to conduct alcoho screening assessments and referrals.		with increased	

**EVALUATION** 

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: To reduce adult and youth alcohol use rates by 10% by the end of 2018, by creating and implementing a media and social marketing advocacy campaign; and implementing an alcohol server/seller intervention training for business establishments to promote healthy lifestyles and healthy choices among civilian and military communities	Increased server skills in preventing underage drinking and adult binge drinking	Pre- and post-skills checklist	With each RBS training
	Increased community support for alcohol-free events	Annual inventory of alcohol-free events	Annually
Objective 2 : To increase the number of policies and laws that directly or indirectly provide resources for prevention and/or create the	Bill passed into law, increasing taxes on alcohol products	Price comparison of alcohol products, pre and post-law	Pre and post enactment of law
environmental conditions that encourage healthy choices.	A portion of alcohol tax revenues earmarked for alcohol prevention	Legislature records	Pre- and post enactment
	P.L. 30-65 expanded to cover 50% of public beaches/parks	Annual inventory of public places covered by policies	Annually
Objective 3: To increase the number of people assessed and referred to treatment and/or receive intervention	Increased clinician knowledge/skills with increased proper diagnoses for treatment plans by 20% in the first year and increase by 5% every year after.	Pre-and post-knowledge and skills surveys	With each training workshop
by establishing a standard- ized protocol for clinicians to conduct alcohol screening assessments and referrals.	Increased referrals for alcohol treatment	Referrals data review at GBHWC	Annually

#### **NUTRITION AND OBESITY PREVENTION**

Fruit and vegetable consumption

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1 : Establish preliminary base line data on family, adult & youth	Fruit & vegetable intake data identified in CDC BRFSS data set for Guam.	<ul> <li>Increased knowledge of NCD program staff on</li> </ul>	Enhanced     measurement of     impact of NCD
fruit and vegetable daily consumption.	2 standardized questions on 24-hour fruit & vegetable intake developed for use on partner workshop registration forms.	fruit and vegetable consumption among target audiences	efforts on relevant behavior change indicators
	<ul> <li>Food &amp; activity journal/logs collected by partner agencies (ex: CHL 900 2-8 year olds)</li> </ul>	<ul> <li>Enhanced skills of NCD program staff</li> </ul>	Improved     understanding     of actual eating
	State-added questions on fruits and vegetable intake included in BRFS.	and Consortium members to provide information on	behaviors and physical activity of the local
	Baseline data on fruit & vegetable consumption in Guam established	nutritional related behaviors in Guam.	population.
	Increased data sets to determine fruits and vegetable intake		

	GOAM NON-COMMO	INICABLE DISEASE S	THATEGIC PLAN
OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 2: Increase availability and access to fruits and vegetables for villages and families through market outlet initiatives.	<ul> <li>Village fruit and vegetable outlets increased: Night markets, produce stands and community supported agriculture (CSAs).</li> <li>Collaborative agreements with community partners to increase availability of fresh fruits and vegetables established.</li> <li>Mini-grants to support local fruit and vegetable sources leveraged.</li> <li>Village projects that promote gardens increased.</li> </ul>	<ul> <li>Increased supply, variety and ease of access to fruits and vegetables for individuals and families in communities</li> <li>Community partnerships that increase the availability of fruits and vegetables strengthened.</li> <li>Increased knowledge about and support for healthy eating and creating community gardens</li> </ul>	Increased     consumption of     fresh fruits and     vegetables     Decreased obesity     rate
Objective 3: Increase fruits and vegetable consumption, availability and access through sustainable home, community, & school gardening initiatives.	<ul> <li>Demonstration home, community and school gardens established</li> <li>Fruit and vegetable seed/plant exchange for NCD partners and communities set up.</li> <li>Service learning as a method to increase garden projects and curricula to a wider audience utilized broadly in schools.</li> <li>Resource reallocation and accountability of gardening supplies and equipment strengthened.</li> </ul>		<ul> <li>Increased fruit and vegetable supply for families, communities and schools.</li> <li>Decreased price and greater availability will increase fruits and vegetable consumption.</li> <li>Knowledge, attitudes and beliefs of gardens and healthy lifestyles instilled in children at an early age.</li> <li>Sustainability of gardens enhanced.</li> <li>Ownership and buy-in of the community established.</li> </ul>
Objective 4: Increase fruit and vegetable consumption and demand through education and public outreach initiatives.	<ul> <li>Workshops on fruit and vegetable cooking, preservation and nutritional benefits in communities/villages conducted with partner organizations.</li> <li>Guam Gardener educational program developed with partner support</li> <li>NCD program workshops conducted at funded gardens</li> <li>Partnerships with Mayors' Council, Village/Parish News created to promote increased availability, production and access to fruits and vegetables</li> <li>Facebook page and other online/social media with content on fruits and vegetables' importance to healthy eating widely promoted</li> <li>Healthy eating/fruit and vegetable recipe book produced</li> </ul>	<ul> <li>Community         assessments show         desire for cooking         classes in the         community.</li> <li>Increased         awareness and         appeal of healthy         eating.</li> <li>Community         members'         gardening         knowledge and         skills enhanced.</li> <li>Increased         community         awareness of the         benefits of growing         fresh fruits and         vegetables</li> </ul>	Increased consumption of fruits and vegetables and physical activity through gardening.  Increased "asking and tasting" behavior of school-age youth  Healthy eating habits sustained for low income families.

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
	<ul> <li>Competitions such as healthy cooking contests launched</li> <li>"Super Chef" mascot to promote healthy eating habits created and popularized</li> <li>Enrollment in free Expanded Food and Nutrition Education Program (EFNEP) promoted at partner sites.</li> <li>Guarn Local Healthy Choice menu item designation/certification developed with restaurants, GVB, health care professionals and</li> </ul>	Recipe books meet federal standards for health and wellness and GDOE standards for nutrition.  Attractiveness of local gardens promoted.  Fresh fruits and vegetables cost decreased for lowincome families.  Increased sense of community ownership	Local gardens     eventually     produce sufficient     crops to supply     other households     and restaurants     with fruits and     vegetables,     generating     income for     gardeners.      Food choices     in restaurants     shifted towards     healthier choices     created with local     produce.

#### **Outcomes Measurement**

**EVALUATION** 

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: Establish preliminary base line data on family, adult & youth fruit and vegetable daily consumption.	<ul> <li>Increased knowledge of NCD program staff on fruit and vegetable consumption among target audiences</li> <li>Enhanced skills of NCD program staff and Consortium members to provide information on nutritional related behaviors in Guam.</li> </ul>	Pre and post knowledge assessment questionnaires Participants' evaluation feedback	Before and after data dissemination After presentations by NCD program staff
Objective 2: Increase availability and access to fruits and vegetables for villages and families through market outlet initiatives.	<ul> <li>Increased supply, variety and ease of access to fruits and vegetables for individuals and families in communities</li> <li>Community partnerships that increase the availability of fruits and vegetables strengthened.</li> <li>Increased knowledge about and support for healthy eating and creating community gardens</li> </ul>	Observation and/or food tally of fruit and vegetable supply  Evaluation feedback of consortium members regarding collaboration with partners  Consider adding a question to BRFSS re: knowledge of community gardens	Annual
Objective 3: Increase fruits and vegetable consumption, availability and access through sustainable home, community, & school gardening initiatives.	<ul> <li>Support for healthy eating and creating home, community and school gardens strengthened.</li> <li>Opportunities for families who will/cannot garden in the isolation of their own homes provided through community gardens.</li> <li>Enhanced acceptability and appeal of fruits and vegetables to children through school gardens with gardening curriculum.</li> <li>Loan and share gardening programs formalized within school and organization programs.</li> </ul>	Community garden count  Key informant interviews  Consider adding a question in YRBS on youth perception of fruits and vegetables  Tally of formal school garden programs	Annual As needed Every 2 years Annual

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 4: Increase fruit and vegetable consumption and demand through education and public outreach initiatives.	cooking classes in the community.	Community surveys, focus groups or community leader interviews	Mid-point during implementation and at the end of implementation period.

#### **NUTRITION AND OBESITY PREVENTION**

Reduction of salt intake

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: By 2018, decrease the number of Guam residents reporting adding salt in cooking and at the table by 10%.	<ul> <li>State-added questions on added salt consumption: 1) in cooking; and 2) at the table included in BRFSS</li> <li>Media products on salt reduction developed and aired</li> <li>Educational videos promoting low salt consumption and nutrition literacy created and disseminated</li> <li>Low-salt alternatives to popular food items made available in local restaurants, groceries and school canteens</li> <li>Policy to remove salt shakers from tables at government institutional cafeterias established</li> <li>Cookbook of local low-salt recipes printed and distributed</li> </ul>	<ul> <li>Knowledge on population salt consumption enhanced</li> <li>Public awareness of the dangers of high salt diets strengthened</li> <li>Public knowledge on ways to reduce salt intake increased</li> <li>Skills of the general public in avoiding high-salt foods increased</li> <li>Public food choices shifted towards low-salt alternatives</li> </ul>	<ul> <li>Capacity to track added salt consumption in the population enabled</li> <li>Salt consumption within Guam's population reduced.</li> <li>Hypertension prevalence decreased</li> </ul>

#### **Outcomes measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: By 2018, decrease the number of Guam residents reporting adding salt in cooking and at the table by 10%.	Knowledge on population salt consumption enhanced	BRFSS data reports on added salt consumption	Annual
	Public awareness of the dangers of high salt diets strengthened	Consider adding a question on awareness of dangers of high salt consumption in BRFSS questionnaire	Annual
	Public knowledge on ways to reduce salt intake increased	Key informant interviews	Mid-point during implementation and at the end of implementation period.

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
	<ul> <li>Skills of the general public in avoiding high-salt foods increased</li> </ul>	Key informant interviews	Mid-point during implementation and at the end of implementation period.
	<ul> <li>Public food choices shifted towards low-salt alternatives</li> </ul>	Key informant interviews	Mid-point during implementation and at the end of implementation period.

#### **NUTRITION AND OBESITY PREVENTION**

Breastfeeding

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: By 2018, increase the percentage of Guam infants who initiate breastfeeding (BF) at birth by 10% and who maintain breastfeeding until 6 months of age by 20%.  Baseline:  % Mothers of newborns who initiate BF at GMHA and continue to nurse their infants at discharge from the hospital: UNKNOWN  % WIC mothers who BF their infants at 6 months:  2011 – 9.0 %  2012 – 7.33 %  Childhood obesity prevalence: UNKNOWN	<ul> <li>Aggregate data on % of infants who are breast-fed at discharge established</li> <li>State-added questions on breastfeeding: 1) at birth; and 2) at 6 months included in BRFSS</li> <li>"Rooming in" policy at GMHA sustained</li> <li>GMHA policy restricting baby bottles in newborn nursery for healthy, full-term infants created and implemented</li> <li>Model policies for BF infants at moms' workplaces (government and private established</li> <li>"Working Moms" BF training curriculum and materials developed</li> <li>Social media/cell phone application targeted at young moms for BF education, promotion and expanding BF support networks created and widely launched</li> <li>Cultural competency strategies to promote the social acceptance of BF (in both public and private venues) promoted</li> <li>BF promotion/advocacy media products created and aired</li> <li>Curriculum and educational programs for BF education to teen moms developed</li> <li>BF education materials widely distributed in villages and BF-related community events regularly celebrated</li> <li>Annual island-wide celebration event for National Breastfeeding Week/Month held</li> <li>BF newsletter developed and disseminated</li> <li>Local lactation specialists trainers and local certification course established</li> <li>Lactation Symposium for Health Care providers conducted</li> <li>BF Coalition re-established</li> <li>BF hotline (Coordinated by Guam's BF Coalition) created</li> <li>Guam breast milk bank established and maintained</li> </ul>	<ul> <li>Knowledge on BF practices in Guam enhanced.</li> <li>Environments supportive of breastfeeding created and protected.</li> <li>Knowledge and attitudes of new mothers regarding benefits of BF strengthened</li> <li>Public acceptance of BF reinforced</li> <li>Local capacity for lactation support and assistance enhanced</li> <li>Network of BF advocates formalized</li> <li>Supply of breast milk augmented</li> <li>Breastfeeding up until 6 months increased</li> </ul>	Enhanced infant health     Reduced childhood obesity rate

#### **Outcomes Measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: Objective 1: By 2018, increase the percentage of Guam Infants who initiate breastfeeding (BF) at birth by 10% and who maintain breastfeeding until 6 months of age by 20%.	Knowledge on BF practices in Guam enhanced.	BRFSS data reports on BF practices	Annual
	Environments supportive of breastfeeding created and protected	Policy survey of workplaces and GMHA	Mid-point during implementation and at the end of implementation period
	<ul> <li>Knowledge and attitudes of new mothers regarding benefits of BF strengthened</li> </ul>	Key informant interviews and/or exit interviews of new mothers upon discharge	Annual
	Public acceptance of BF reinforced	Key informant interviews	Mid-point during implementation and at the end of implementation period.
	Local capacity for lactation support and assistance enhanced	Key informant interviews  Census of certified lactation specialists	Mid-point during implementation and at the end of implementation period.  Annual
	Network of BF advocates formalized	Coalition By-laws Membership tally of BF coalition	On establishment Annual
	Supply of breast milk augmented	Breast milk supply tally	Annual
	Breastfeeding up until 6 months increased	Well-baby clinic records WIC records	Annual

#### PHYSICAL ACTIVITY

OBJECTIVE OUTPUTS OUT	UTCOME MEASURES	IMPACT MEASURES
increase the percentage of Guam adults participating in 150 minutes or more of aerobic physical activity per week from 48% to 56%.  Disc Golf clinics conducted at least twice per year.  Educational and promotional materials developed.  50% of all parks in Guam revitalized/adopted.  Bicycle lanes, routes and paths successfully developed, created and maintained; and used by community.  Educational campaigns on road safety conducted.  Action team worked with at least 1 physical activity infrastructure being built or revital-	Increased walking trails and friendly paths and walkways near schools  Walking to school promoted and facilitated  Increased physical activity in multiple settings  Increased access of population to safe and usable parks  Policy on Bicycle lanes implemented and strengthened  Increased knowledge about	<ul> <li>Increased overall physical activity levels for general population</li> <li>Decreased adult obesity rate</li> </ul>

## PHYSICAL ACTIVITY

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 2: By 2018, increase the percentage of Guam high school students physically active at least 60 minutes per day on 5 or more days from 37.4% to 47.4%.	Section 715(12), 1 GCA modified to require 60 minutes of physical education (PE) per school day, 5 days a week	PE classes expanded to run for 60 minutes a day, at least 3 to 5 days a week in all Guam schools  Increased physical activity for high school students	<ul> <li>Increased overall physical activity levels for student population</li> <li>Decreased high school youth obesity rate</li> </ul>
Objective 3: By 2018, increase the percentage of children in Guam who engage in 60 minutes (1 hour) or more of physical activity daily by 10%.	<ul> <li>School incentive program delineated and accepted by GDOE</li> <li>Templates and examples of best practices for HUSSC disseminated</li> <li>Educational and advocacy materials developed and distributed</li> </ul>	Signed MOU and an approved COA Standards & Guidelines Plan incorporated within the Nutrition & Physical Fitness Wellness Policy  At least 10 Guam DOE schools will have been rewarded due to meeting PA standards and requirements. Increased knowledge about bike safety  At least 10 Guam DOE Schools certified as Bronze, Silver, Gold, and/or Gold of Distinction Schools by meeting HUSSC criteria  Increased physical activity level of children in Guam	Decreased child obesity rate
Objective 4: By 2018, increase the percentage of government of Guam employees involved in the worksite wellness program from 23.4% to 60%.	<ul> <li>Workplace health screening activities conducted.</li> <li>Events such as such as: 1) Departhalon Events, 2) 2K/5K runs, 3) Biggest Loser Challenge, 4) Exercise Pop Up Video implemented.</li> <li>NCD educational and advocacy materials developed.</li> <li>Worksite wellness evaluation report produced for each participating worksite.</li> <li>Worksite Wellness Steering Committee established.</li> </ul>	<ul> <li>Increased         participation of         Government of         Guam employees         in the Worksite         Wellness Program</li> <li>Knowledge of         workers regarding         importance of         physical activity         enhanced</li> <li>Worksite Wellness         programs         strengthened and         sustained</li> <li>Attitude towards         physical activity         improved in         working adults</li> </ul>	<ul> <li>Increased overall adult physical activity levels</li> <li>Reduced adult obesity rate</li> </ul>

#### **Outcomes Measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: By 2018, increase the percentage of Guam adults participating in 150 minutes or more of aerobic physical activity (PA) per week from 48% to 56%.	<ul> <li>Increased walking trails and friendly paths and walkways near schools</li> <li>Walking to school promoted and facilitated</li> <li>Increased physical activity in multiple settings</li> <li>Increased access of population to safe and usable parks</li> <li>Policy on Bicycle lanes implemented and strengthened</li> <li>Increased knowledge about bike safety</li> </ul>	Environmental scan of walking paths and bike lanes  Direct observation  Percentage of adults and youth with adequate PA levels on BRFSS and YRBS  Tally of revitalized parks  Pre and post survey on bike safety knowledge	Annual  BRFSS – Annual YRBS – every other year  At every bike safety community education event
Objective 2: By 2018, increase the percentage of Guam high school students physically active at least 60 minutes per day on 5 or more days from 37.4% to 47.4%.	<ul> <li>PE classes expanded to run for 60 minutes a day, at least 3 to 5 days a week in all Guam schools</li> <li>Increased physical activity for high school students</li> </ul>	School survey of PE class duration and frequency  Percentage of high school youth with adequate PA levels on YRBS	Mid-point during implementation and at the end of implementation period
Objective 3: By 2018, increase the percentage of children in Guam who engage in 60 minutes (1 hour) or more of physical activity daily by 10%.	<ul> <li>Signed MOU and an approved COA Standards &amp; Guidelines Plan incorporated within the Nutrition &amp; Physical Fitness Wellness Policy</li> <li>At least 10 Guam DOE schools will have been rewarded due to meeting PA standards and requirements.</li> <li>At least 10 Guam DOE Schools certified as Bronze, Silver, Gold, and/or Gold of Distinction Schools by meeting HUSSC criteria</li> <li>Increased physical activity level of children in Guam</li> </ul>	Review of school policy records  Awards tally of school PA incentive program	Mid-point during implementation and at the end of implementation period
		Percentage of middle school youth with adequate PA levels on YRBS	Annual  Every other year

**EVALUATION** 

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 4: By 2018, increase the percentage of government of Guam	Increased participation of Government of Guam employees in the Worksite Wellness Program	Attendance records of participating worksites	Annual
employees involved in the worksite wellness program from 23.4% to 60%.	Knowledge of workers regarding impor- tance of physical activity enhanced	Pre and post-knowledge surveys	With every education al activity at worksite
	Worksite Wellness programs strengthened and sustained	Annual assessment of participating worksites	Annual
	<ul> <li>Attitude towards physical activity im- proved in working adults</li> </ul>	Worksite wellness worker satisfaction survey	Annual

#### Tobacco Prevention and Control

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: To increase taxes by 100% on all tobacco products by December 2018.  Baseline:  Current tax rate for cigarettes: \$3.00 per pack	<ul> <li>TC champions identified</li> <li>TC advocacy tool kits created</li> <li>Advocacy campaigns implemented</li> </ul>	Increased knowledge about and support for tax increase     Tax bill passed     Tobacco prices increased	Decreased     affordability of     tobacco products a     decreased tobacco     consumption     Increased funding     for cancer control
Objective 2: To remove all exceptions in tobacco control mandate (10 GCA Chap. 90) by December 2018.  Baseline:  Current exceptions - bars, open outdoor patio areas, offices that are exclusive to only smokers, hotel rooms	<ul> <li>TC champions identified</li> <li>TC advocacy tool kits created</li> <li>Advocacy campaigns implemented</li> </ul>	Increased knowledge about and support for 100% smoke-free law     Natasha act amended	Reduced exposure to second-hand smoke  100% smoke-free becomes the social norm
Objective 3: To include Brief Tobacco Intervention (BTI), Cessation resources and American Cancer Society's Fresh Start Cessation trained facilitator as part of Worksite Wellness Program by January 2015.  Baseline:  Wanting to quit – Adults: 2011 - 70.0%	<ul> <li>Updated BTI Training curriculum</li> <li>New cessation resources created; existing resources updated</li> <li>Health Coaches and agency HR staff trained in BTI and provided with cessation resource packets</li> <li>Media materials promoting quitline and website</li> </ul>	Health coaches: Increased knowledge and cessation skills of health coaches      Workers: Increased awareness of cessation resources; Increased quit attempts      Increased utilization of Quitline and Quit website	•Increased successful quit attempts, as measured by increased % of ex- smokers
% Ex-smokers – Adults 2011 - 14.6%		A STATE OF THE STATE OF T	
2012 - 13.5%			

#### Outcomes Measurement

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: To increase taxes by 100% on all tobacco products by December 2018.	<ul> <li>Increased knowledge about and support for tax increase</li> </ul>	Pre-and post-knowledge surveys	With each outreach activity
Baseline:	Tax bill passed	Observation	Once
Current tax rate for cigarettes: \$3.00 per pack	Tobacco prices increased	Price comparison pre- and post-enactment	Pre- and post-enact- ment of tax increase
Objective 2: To remove all exceptions in tobacco control mandate (10 GCA Chap. 90) by December 2018.	Increased knowledge about and support for 100% smoke-free law	Pre-and post-knowledge surveys	With each outreach activity
Baseline:	Natasha act amended	Smoke-free public places checklist	Annual tally
Current exceptions - bars, open outdoor patio areas, offices that are exclusive to only smokers, hotel rooms			
Objective 3: To include Brief To- bacco Intervention (BTI), Cessation resources and American Cancer So- ciety's Fresh Start Cessation trained facilitator as part of Worksite Well- ness Program by January 2015. Baseline:	<ul> <li><u>Health coaches</u>: Increased knowledge and cessation skills of health coaches</li> <li><u>Workers</u>: Increased awareness of cessation resources; Increased quit attempts</li> </ul>	Health coaches:  1. Pre-and post cessation knowledge surveys	Health coaches:  1. With each BTI training workshop
% Wanting to quit – Adults:	Increased utilization of Quitline and Quit website	Workers:	Workers:
2011 - 70.0% % Ex-smokers – Adults		Increased % of tobacco users reporting knowledge of quitline and quit	1. Annually
2011 - 14.6%		website	
2012 - 13.5%		Increased quit at- tempts in BRFSS	2. Annually
		Utilization rates of quit- line and quit website	Quarterly (provided by Alere, Inc.)

# **Cross-Cutting Areas**

#### **Administration and Coordination**

**EVALUATION** 

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: By the end of 2014, to formulate a "commit to action" statement for executive concurrence among policy makers.	<ul> <li>"Commit to action" statement drafted</li> <li>"Commit to action" statement signed by all relevant stakeholders</li> <li>Advocacy campaign materials created; NCD prevention and control advocacy campaign launched</li> </ul>	Political support and endorsement of the NCD Prevention and Control Strategic Action Plan 2014-2018 secured	Policy and program measures from NCD Strategic Plan facilitated through political will
Objective 2: By the end of 2015, to strengthen the NCD Program by establishing an NCD steering committee and formalizing the organization, structure and operating agreement of the NCD Consortium.	<ul> <li>NCD organizational guidelines formally endorsed by members</li> <li>Steering Committee created and staffed</li> <li>Membership recruitment materials created and distributed</li> </ul>	NCD Consortium membership roster strengthened	Widespread acceptance and credibility of NCD Consortium achieved
Objective 3: By the end of 2016, to identify sustainable funding support for the NCD Program within the Department of Public Health and Social Services to coordinate and integrate the approaches to NCDs for Guam.	<ul> <li>NCD Coordinator recruited</li> <li>NCD program positions established within GovGuam/DPHSS organizational chart</li> <li>Funding secured for NCD program</li> </ul>	NCD Programs are fully integrated within DPHSS with ongoing funding support and resources.	NCD program management sustainability ensured ongoing funding support and resources.

#### **Outcomes Measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: By the end of 2014, to formulate a "commit to action" statement for executive concurrence among policy makers.	<ul> <li>Political support and endorsement of the NCD Prevention and Control Strategic Action Plan 2014-2018 secured</li> </ul>	Officially signed "Commit to action" statement	Upon completion of signatories
Objective 2: By the end of 2015, to strengthen the NCD Program by establishing an NCD steering committee and formalizing the organization, structure and operating agreement of the NCD Consortium.	NCD Consortium membership roster strengthened	Membership review	Mid-point during implementation and at the end of implementation period
Objective 3: By the end of 2016, to identify and establish sustainable funding support for the NCD Program within the Department of Public Health and Social Services to coordinate and	<ul> <li>NCD Programs are fully integrated within DPHSS with ongoing funding support and resources.</li> </ul>	DPHSS Program and staff line-up Budget review for NCD programs	Annual

#### **Communications**

To motivate individuals, families and Guam's community- at- large (businesses, non-profit organizations, non-government agencies, faith-based organizations and other community based-organizations) to live healthier lifestyles by promoting and supporting the Non-Communicable Disease (NCD) vision, mission, values, and activities using culturally relevant and targeted health promotions.

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: By 2018, create, implement, and evaluate Guam's NCD Media Campaign (Live HEALTHY Guam!) and raise awareness of the cost, benefits, and negative consequences of unhealthy eating, physical inactivity, alcohol and tobacco use and abuse in relation to NCDs among youth and adults.	<ul> <li>Media and advocacy materials developed and disseminated</li> <li>Advocacy activities conducted</li> <li>Media Coordinator recruited</li> <li>Media campaign evaluation reports completed</li> </ul>	Increased awareness of the negative consequences of unhealthy eating, physical inactivity, tobacco and alcohol use and abuse and their relation to chronic diseases Increased physically active youth and adults Greater consumption of local fruits and vegetables	Increased overall physical activity levels for general population  Decreased obesity rate for youth and adults  Reduced tobacco and alcohol consumption  Reduced prevalence of NCDs in general population
Objective 2: By 2018, the community will take action and support NCD's action teams in promoting public/ community advocacy for policies on non-communicable disease prevention, control and social environmental changes.	PowerPoint presentations and other outreach/advocacy materi- als and tools created and utilized by the NCD action teams	Increased public awareness of the burden of non-communicable diseases  Increased involvement of community at large in public advocacy and passage of laws that support non-communicable disease prevention, control and social environmental changes	• Enhanced policy and program environment supportive of healthy lifestyles and interventions to prevent/control NCDs
Objective 3: By 2018, promote and increase the participation of employees and Government of Guam agencies involved in Guam's worksite wellness programs.	<ul> <li>Social media and other media promotional campaigns for Worksite Wellness program implemented</li> </ul>	Increased participa- tion of employees and agencies in the Worksite Wellness Programs	Enhanced worker health and well- being
Objective 4: By 2018, develop and implement communication strategies into a systematic and coordinated process within DPHSS and the NCD Consortium to provide regular communication to the community-at-large on the prevention and control of non-communicable diseases and related risk factors on Guam.	Communications protocols and templates for NCD prevention and control established	Increased percentage (up to 70%) of staff, public health programs, partners and stakeholders implementing systematic and comprehensive communication strategies for noncommunicable disease prevention and health promotion	NCD prevention and control acknowledged as a priority for the community

#### **Outcomes Measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: By 2018, create, implement, and evaluate Guam's NCD Media Campaign (Live HEALTHY Guam!) and raise awareness of the cost, benefits, and negative consequences of unhealthy eating, physical inactivity, alcohol and tobacco use and abuse in relation to NCDs among youth and adults.	<ul> <li>Increased knowledge of the negative consequences of unhealthy eating, physical inactivity, tobacco and alcohol use and abuse and their relation to chronic diseases</li> <li>Increased physically active youth and adults</li> <li>Greater consumption of local fruits and vegetables</li> </ul>	Pre- and post-knowledge surveys  Prevalence of physically active youth and adults in YRBS and BRFSS  Percentage of adults and youth with adequate fruit and vegetable consumption on YRBS and BRFSS	With each media activity  Annually for BRFSS  Every other year for YRBS
Objective 2: By 2018, the community will take action and support NCD's action teams in promoting public/ community advocacy for policies on non-communicable disease prevention, control and social environmental changes.	<ul> <li>Increased public awareness and knowledge of the burden of non-communicable diseases</li> <li>Increased involvement of community at large in public advocacy and passage of laws that support non-communicable disease prevention, control and social environmental changes</li> </ul>	Pre- and post- awareness and knowledge surveys  Systematic observation and tally of public hearing attendance for NCD-related bills	With each promotional/ advocacy activity With each public hearing for an NVCD- related bill
Objective 3: By 2018, promote and increase the participation of employees and Government of Guam agencies involved in Guam's worksite wellness programs.	Increased participation of employ- ees and agencies in the Worksite Wellness Programs	Attendance sheets at worksite wellness activities	Annual
Objective 4: By 2018, develop and implement communication strategies into a systematic and coordinated process within DPHSS and the NCD Consortium to provide regular communication to the community-at-large on the prevention and control of noncommunicable diseases and related risk factors on Guam.	Increased percentage (up to 70%) of staff, public health programs, part- ners and stakeholders implement- ing systematic and comprehensive communication strategies for non- communicable disease prevention and health promotion	Tally of communications interventions conducted by each NCD action team	Annual

## pata And Surveillance

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: By the end of 2014, the NCD Data and Surveillance Action Team will have established an Infrastructure of NCD/SNAPO health indicators with at least 2 indicators per action team/work group.	<ul> <li>NCD data gatekeepers identified</li> <li>NCD data collection network established</li> <li>NCD indicators required by each NCD Action team identified</li> <li>NCD data inventory created</li> <li>More members recruited for data and surveillance action team</li> </ul>	<ul> <li>NCD data identified and collected from reli- able sources</li> <li>Based on priority areas identified, data collected to support and align with each action team's goals and objectives</li> </ul>	NCD surveillance system strengthened
Objective 2: By 2018, Guam will have a centralized data and surveillance system of the NCD/SNAPO health indicators.	NCD data available on Live Healthy Guam website	Data collected readily shared with and accessible to the community, organizations, stakeholders, policy makers, and interested parties who are involved in reducing NCDs on Guam	NCD data dissemination facilitated

#### **Outcomes Measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: By the end of 2014, the NCD Data and Surveillance Action Team will have established an infrastructure of NCD/SNAPO health indicators with at least 2 indicators per action team/work group.	<ul> <li>NCD data identified and collected from reliable sources</li> <li>Based on priority areas identified, data collected to support and align with each action team's goals and objectives</li> </ul>	Data clearinghouse infra- structure checklist  Data gap mapping/data indicator inventory	Annual
Objective 2 : By 2018, Guam will have a centralized data and surveillance system of the NCD/SNAPO health indicators.	Data collected readily shared with and accessible to the community, organizations, stakeholders, policy makers, and interested parties who are involved in reducing NCDs on Guam	Number of hits on Live Healthy Guam website data page	Monthly average

#### Policy and Advocacy

EVALUATION

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: By 2018 to formalize and strengthen the Policy and Advocacy Action Team	<ul> <li>Roles and responsibilities clearly defined</li> <li>Operating procedures delineated.</li> <li>Priority policies identified, in consultation with other action teams</li> </ul>	- Increased capacity and streamlined operations of Policy and Advocacy action team	• Increased efficacy of Policy and Advocacy team in mobilizing legislative and community support for NCD policies
Objective 2: By 2018 the Policy and Advocacy Action Team will have supported all NCD action teams in their efforts to develop policy, systems, and environmental (PSE) related changes.	Consistent attendance at Consortium meetings     Technical assistance and resource materials provided to action teams	Action Teams enabled to follow achieve their policy outcomes	Enhanced policy environment for healthier lifestyles
Objective 3: To facilitate and sustain stakeholders in addressing NCDs.	Key policy makers relevant to NCD policy identified     Network of policy advocates for NCD prevention and control formed	Increased stakeholder support for NCD policies	Increased efficacy of Policy and Advocacy team in mobilizing legislative and community support for NCD policies

#### **Outcomes Measurement**

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: By 2018 to formalize and strengthen the Policy and Advocacy Action Team	Increased capacity and streamlined operations of Policy and Advocacy action team	Capacity and performance assessments	Annual
Objective 2: By 2018 the Policy and Advocacy Action Team will have supported all NCD action teams in their efforts to develop policy, systems, and environmental (PSE) related changes.	Action Teams enabled to follow achieve their policy outcomes	Tally of action teams' policy achievements	Annual
Objective 3: To facilitate and sustain stakeholders in addressing NCDs.	Increased stakeholder support for NCD policies	Stakeholder inventory and network mapping	Annual

# 8. ACKNOWLEDGEMENTS

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The Plan was developed with the guidance of Angelina G. Mummert, MPA, under contract with the Department of Public Health and Social Services. The Communications Plan was developed by Christine D. Camacho, BA, also under contract with the Department of Public Health and Social Services. The Evaluation Plan was developed by Annette M. David, MD, MPH, under contract with the World Health Organization, in collaboration with the members of the various action teams.

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NCD Consortium Members:

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Agency for Human Resources	Nutrition	CAMACHO, GEORGE
	WWP/HC	MENO, TILDA
American Cancer Society	Tobacco	ARTERO, MARISHA
Amot Taotao Tano Farm	Nutrition	AGUON, GWENDOLYN
	Nutrition	NEŁSON, BERNICE
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Bureau of Statistics & Plans	WWP/HC	CUABO, TERRY
	Data & Surveillance	GUERRERO, MONICA
	WWP/HC	SABLAN, MERNALEE
	Data & Surveillance	TAITAGUE, ESTHER
Calvo's Insurance	Physical Activity	LUJAN, PINKI
<u>,                                      </u>	Physical Activity	SMITH-CALVO, CLARE
Catholic Social Services	Nutrition	PEREZ, JACINTA
		SUZUKI, MICHAEL A.
Church of Christ	Nutrition	COLOMA, ALEX
	Nutrition	COLOMA, BRENDA
Civil Service Commission	WWP/HC	AGUON, TONY
Community Advocates	WWP/HC	ALAVE, VERONICA
Community Advocates	Nutrition	BALDONADO, ZENAIDA
Community Advocates	Nutrition	BAUTISTA, DUSTIN
Community Advocates	Nutrition	BROWN, ETHEL
Community Advocates	Alcohol	CALDWELL, TANYA
Community Advocates	Communication/Media	CAMACHO, CHRISTINE
Community Advocates	Communicaton & Media	CARBUNGCO, RUBY
Community Advocates	Nutrition	CARTAGENA-JIMENEZ, GRACIELA
Community Advocates	Alcohol	CATOTOCAN, RICK

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Community Advocates	Nutrition	CEFRE, GLORYANN
Community Advocates	Nutrition	CHARFAUROS, GEORGINIA
Community Advocates	Nutrition	DIZON, ANGELICA
Community Advocates	Alcohol	EVELUCK, HENTRICK
Community Advocates	Nutrition	FORSHEE, MAY
Community Advocates	Nutrition	GATUS, LIKITA
Community Advocates	Nutrition	HAMILTON, RETTASUE
Community Advocates	Alcohol	KALLINGAL, DR. GEORGE
Community Advocates	Data & Surveillance	LUARCA, MARIE
Community Advocates	Nutrition	MARION, ERIKA
Community Advocates	Nutrition	MATTEWS, CRAIG
Community Advocates		PUMO, DANIEL
Community Advocates	Alcohol	QUITUGUA, ALEJANDRA
Community Advocates	Nutrition	RUSTICK, HOLLY
Community Advocates	Alcohol	TAIJERON, ESHTER
Community Advocates	Tobacco	TAIJERON, PATRICK
Community Advocates	Tobacco	TOVES, DARCY
Community Advocates	Nutrition	UBALDO, CHRISTINE
Community Advocates	Alcohol	UNTALAN, CHARLENE
Community Advocates	Nutrition	VILLANUEVA, ELVIRA
Community Advocates	Nutrition	VILLARDE, LORRAINNE
	Nutrition	WILDI, EVELYN
Council of Arts and Humanities	WWP/HC	BAILEY, BREA
THE PROPERTY OF THE PARTY OF TH	WWP/HC	DUENAS, MARK
Department of Administration	WWP/HC	CANDASO, LEONORA
	WWP/HC	CASTRO, ROBERTA JOYCE
	Tobacco	DIAZ, KATHY
Department of Agriculture	Nutrition	BORJA, JOHN
	WWP/HC	MARTIN, NATHANIEL
Department of Chamorro Affairs/HRRA	WWP/HC	PORTODO-HERNANDEZ, PATTI
	WWP/HC	PUALINO, JENNIFER
	Physical Activity	SANTOS, JOSEPH
Department of Corrections	WWP/HC	FLEMING, MARK
Department of Labor	Tobacco	LEON GUERRERO, RUTH
Department of Land Management	WWP/HC	CASEM, JHOANA
	WWP/HC	EVANGELISTA, NECIE MAE
Department of Military Affairs	WWP/HC	PARINAS, JULIA
	WWP/HC	SAN AGUSTIN, CHARITO
Department of Parks & Recreations	WWP/HC	ALEGARBES, LINDA
	WWP/Steering Committee	MENDIOLA, JOSEPH

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Department of Public Health & Social Services	Tobacco	BELL, MARGARET
	Physical Activity	BESEBES, BARBARA
	WWP/HC	BORJA, CHAZ
	Nutrition	CASTILLO, ARCY
	Alcohol	CASTRO, RUBYROSE
	Nutrition	DAVID, REMEDIOS
	WWP/HC	DELA CRUZ, ARLEEN
	Nutrition	DELGADO, DEBORAH
**************************************	WWP/HC	DIRAS, DARYL
	Tobacco	EPRES, FRANCIS
	WWP/HC	HAUTEA, JUNELYN
	СРНО	KANESHIRO, SUZANNE SISION
	Tobacco	MANIBUSAN, EVANGELINE
	WWP/HC	MORA, ABRAHAM
	Nutrition	MORISS, CHARLES
	Clinical	OKADA, LYNN
	WWP/HC	REYES, WILLIAM
	Physical Activity	RIVERA, BARBARA
	WWP/HC	SALAS, RAYMOND
	Data & Surveillance	TAIJERON, BERTHA
	Nutrition	TAITANO, DARLENE
	Data & Surveillance	TORRES, ENRIQUE
	WWP/HC	WADE, TINA
	Nutrition	WEISS, STEPHEN
Department of Public Works	WWP/HC	MUNA, DOMINIC
	Physical Activity	AQUININGOC, JOLYN
	Physical Activity	DUARTE, MARIA
	WWP/HC	DUENAS, MONA
	Tobacco	GUMATAOTAO, ANTHONY
	Physical Activity	KAAI, PETER
	Tobacco	SABLAN, JOSEPH
	Tobacco	SANTOS, VICENTE
	Physical Activity	WILSON, MARYROSE
Department of Revenue & Tax	WWP/HC	SAN NICOLAS, BARBARA
	WWP/HC	UNSIOG, MIKE
Department of Youth Affairs	Alcohol	AFAISEN, DAVID
	Nutrition	ALFRED, MCELLEN
	Nutrition	ARTERO, GREGORIO

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Department of Youth Affairs	WWP/HC	BALAJADIA, ROBINETTE
	Nutrition	MENDIOLA, ADONIS
1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1- 1	Nutrition	PALACIOS, DINO JR
	Alcohol	RESPICIO, REBECCA
	Alcohol	TALAVERA, THOMAS
	WWP/HC	UNCANGCO, GLENDA
Diabetes Educator		DEVIN, KRIS
Diagnostic Laboratory Services	Alcohol	HENSON, CYNTHIA
	Alcohol	JACAR, MARY JEAN
Disc Golf Experts	Physical Activity	EC, VERLAN VAN
Doctor's Clinic/Cancer Council of the Pacific	Tobacco	TAITANO, DR. JOHN
DOD/AFGE	Nutrition	BROWN, WAYNE
Faith Community-Cursillo	Nutrition	SANTOS, EUGENE
Farmers CoOp	Nutrition	CEFRE, GREG
FDMS	Nutrition	PEREZ, DANTE
FHP Health Center	Policy & Advocacy	GRINO, ROSE
GALA	Nutrition	DELA CRUZ, TIM
	Communicaton & Media	SAN NICOLAS, EVAN
GETC(KGTF) PBS	Communication & Media	GOGUE, CATHY
		LAGUANA, TESS
	WWP/HC	PEREDA, LEIGH
Govenor's Serve Guam Commission & Americorp	Nutrition	AGUON, DORIS
	WWP/HC	LUJAN, LAGRISMAS
	Nutrition	RUIZ, ZINA
	Nutrition	SAN NICOLAS, TIFFANY
	Nutrition	WILKERSON, DARRELL
Governor's Office	WWP/Steering Committee	CALVO, MARK
	WWP/HC	CASTRO, CASSANDRA
	WWP/Steering Committee	PEREZ, CAROL
Governor"s Council on Fitness & Sports	Physical Activity	WOLFF, ATTY PATRICK
Guahan Academy Charter School	Physical Activity	JENSEN, LISA
Guam Behavioral Health and Wellness Center	Policy Advocacy	BENAVENTE, BARBARA
	Alcohol	CRISOSOTOMO, BERNARD
	Tobacco	CRUZ, PETER
	Alcohol	DIMLA, SARA BEATRIZE G.
	WWP/HC	GUERRERO, IGNACIO
	Physical Activity	OSBORN, GAYLE
	WWP/HC	PANGELINAN, EMILY
	Alcohol	PAULINO, HELENE
	WWP/HC	RICHARDS, RICHARD

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Guam Behavioral Health and Wellness Center	Data & Surveillance	ROSADINO, MARYGRACE
	Alcohol	SABANG, DON
	Alcohol	SASAMOTO, MICHELLE
	Alcohol	TOPASNA, AUDREY
	Alcohol	URSUA, JAMES
	Торассо	MALIG, REMEDIOS
Guam Cancer Care	Policy & Advocacy	CUABO, TERRY
	Nutrition	LAURON, CHALORNA
	Physical Activity	QUITO, KARINA
Guam Cancer Registry	Data & Surveillance	BORDALLO, RENATA
Guam Community College	Nutrition	BAMBAO, REYNA
	WWP/HC	BILONG, DANILO
	Nutrition	LIZAMA, TROY E.A.
	WWP/HC	SIGUENZA, ROSEMARIE
Guam Contractors License Board	WWP/HC	PEREZ, MARIA
	Nutrition	SANTOS, RONNIE
	Physical Activity	VALENTINO, NADIA GRACE
Guam Customs & Quarantine	Tobacco	AFLAGUE, GERARD
	WWP/HC	MCDONALD, CHARLES
	WWP/HC	MENDIOLA, JOHNRIC
	WWP	QUICHOCHO, MICHELLE
Guam Department of Education	WWP/HC	ANDERSON, CHRIS
	WWP/HC	BUKIKOSA, DORIS
	Nutrition	CHARGUALAF, DEANNDRA
	WWP/HC	CHARGUALAF, V
	WWP/HC	CRUZ, ERIKA
	Nutrition	CRUZ, PAUL
	Physical Activity	DIAZ, BETTY
	WWP/HC	DOREGO, JONAS
	Nutrition	HENDRICKS, DAVID
	WWP/HC	MONFORTE, NICOLE
	WWP/HC	MONTAGUE, JOE
	Data & Surveillance	NEDEDOG, PAUL
	Physical Activity	PAET, SHERWIN
	WWP/HC	QUINATA, BOBBIE
	WWP/HC	QUINENE, JULIETTA
- A	WWP/HC	REYES, LILLY
	Nutrition	ROSARIO, JESSE
	Physical Activity	SABLAN, MATT
	Nutrition	SAN NICOLAS, TIFFANY
	WWP/HC	SCHLOSSBON, ROSS

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Guam Department of Education	WWP/HC	TAITINGFONG, ROMANA
	Nutrition	WILKERSON, DARRELL
	Nutrition	WILLIAMS, GRANT
Guam Economic Developent Authority	WWP/HC	QUINATA, CARL
Guam Election Commission	WWP/HC	EDQUILANE, MICHAEL
	WWP/HC	GUMATAOTAO, PACIANO
	WWP/HC	ISEKE, JOSEPH
Guam Energy Office	Physical Activity	CALVO, PETER
	WWP/HC	MUNA, STEVEN
	WWP/HC	SIGUENZA, THERESE
Guam Environmental Protection Agency	WWP/HC	BALURAN, GALO
104 6 - 000	WWP/HC	LEON GUERRERO, WALTER
Guam Fire Department	WWP/HC	ARTERO, LT. EDWARD
	WWP/HC	SORIANO, CAPT. DEAN
Guam Girl Scouts	***************************************	FISH, VICKIE
Guam Homeland Security/Civil Defense	WWP/HC	ARTERO, KEN
	WWP/HC	BENITO, ALYSSA
Guam Housing & Urban Renewal Authority	WWP/HC	AGUERO, ART
	WWP/HC	BALATOCAN, ROSANNE
	WWP/HC	BERSAMIN, KIMBERLY
	WWP/HC	FRANCISCO, TIM
Guam Housing Corporation	WWP/HC	BLAS, EMILY
	WWP/HC	TOVES, ELEANOR
Guam Memorial Hospital Authority	WWP/HC	BATACLAN, LESLIE
	Nutrition	RADA, CARLO
	WWP/HC	TANGLAO, JASMINE
	WWP/HC	VEKSLER, RENEE
Guam National Guard	Data & Surveillance	CRUZ, LISA / MSGT
	Alcohol	FEJARAN, CYNTHIA
	Alcohol	TYQUIENGCO,JOSHUA
Guam Police Department	WWP/HC	AGUON, MICHAEL
	WWP/HC	LENDER, MIKE
	Tobacco	RYAN, LEON
Guam Power Authority	Physical Activity	BARCINAS, VINCENT
	WWP/HC	MASNAYON, RICHARD
	Physical Activity	PANGELINAN, JAMIE
	WWP/HC	UNPINGCO, JOE
Guam Professiona; Engineers, Architects, and Land Surveyors Board	WWP/HC	BORJA, RAY
	WWP/HC	VILLANUEVA, MARIE
Guam Public Library System	WWP/HC	CRUZ, THERESA

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Guam Public Library System	WWP/HC	TAITAGUE, RODNEY
Guam Regional Medical City	Physical Activity	PEREZ, MARIA ISABEŁ
	Physical Activity	TAITANO, JOHN RAY
Guam Regional Transit Authority	WWP/HC	ABAYA, MYRA
	WWP/HC	GUTIERREZ, NICOLE
Guam Souls Unborn Spirit	Alcohol	VALENCIA, VEDALEMA
Guam Surgical Group	Policy & Advocacy	NOVAK, VIVIAN
Guam Telephone Authority	Physical Activity	REDMAN, STEVEN
Guam Visitor's Bureau	WWP/HC	CAMACHO, KRAIG
	WWP/HC	DENIGHT, NATHAN
Guam Water Works Authority/ CCU	WWP/HC	BERMUDES, JULIUS
Guma Mami, Inc.	Nutrition	CABRALES, JIRRAH
	Nutrition	GRAJEK, BERNI
	Nutrition	SAN NICOLAS, MISHAEL
Health Partners LLC	Consultant	DAVID, ANNETTE
Health Services of the Pacific		GOGUE, MARGARET
Horinouchi Weliness	Nutrition	FLORES, ADRIAN
	Nutrition	HORINOUCHI, DR. KEITH
Bike	Nutrition	RENFRO, THOMAS
PROADLLC	Tobacco	NICELY, MARILYN
Island Girl Power	Nutrition	BLAZ, JUANITA
<del>)                                    </del>	Nutrition	MENDIOLA, DOREEN
Islandwide Beautification Task Force	Physical Activity	Atty, Naoko Shirnizu
	Physical Activity	Gagaring, Alex
lust Say No Dance Crew	Nutrition	DENNEY, MARGARET
	Alcohol	TALAVERA, THOMAS
Ledge Light Technologies	Nutrition	PANGELINAN, ZITA
MADD & 4Life Savvy Fitness Program	Physical Activity	VALENCIA, VEDALEMA
	Alcohol	VALENCIA, VELMARIE
MASAKATA Community Garden Gu Natural Food	Nutrition	WATERMAN, CASSANDRA
Mayor's Council of Guam	Nutrition	BAUTISTA, JESSE
	Nutrition	CHARFAUROS, JOEY
	Nutrition	CRUZ, ANTHONY
	Physical Activity	SAVARES, MELISSA
Mountain Pacific Quality Health Guam Diabetes Project	Policy & Advocacy	ALMONTE, GLYNIS
	Policy & Advocacy	ROJAS, JINA
Office of Senator Benjamin J. Cruz	Tobacco	CRUZ, SENATOR BENJAMIN J. CRUZ
	Tobacco	LIDIA, MIKE
Office of Senator Dennis G. Rodriguez, Jr	Policy & Advocacy	MESNGON, JOSEPH

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Office of Senator Dennis G. Rodriguez, Jr.	Policy & Advocacy	RODRIGUEZ JR., SENATOR DENNIS G.
	Tobacco	SHELTON, AMANDA
Office of the Attorney General	WWP/HC	CHARFAUROS, CARLINA
	WWP/HC	SALUDO, HEATHER
Office of the Chief Medical Examiner	WWP/HC	BAMBA, JOHANNA
Organic Beauty & Wellness	Physical Activity	BORDALLO, YOLAND
Pacific Island Health Officers Association	Policy & Advocacy	MARIANO, CERINA
Paradise Fitness	Alcohol	BRILLANTES, MELVIN
	Physical Activity	RYAN, JOHN
	Physical Activity	SGRO, MICHAEL
Port Authority of Guem	WWP/HC	BLAS, DORIS
	WWP/HC	SANTOS, FRANK
Portamedic Guam	Communication & Media	TUCKER, GERTRUDES
Rotary Club Guam-Sunrise	Nutrition	BORJA, BILL
	Physical Activity	REDMAN, STEVEN
	**************************************	SALAS, BARBARA
	Physical Activity	VAN, BOXTEL, BETHANY
Sanctuary	Alcohol	CRUZ, MONICA
	Alcohol	GUZMAN, STEPHANIE
	Alcohol	LUJAN, MILDRED "MILLIE"
	Tobacco	REYES, MAMALING
	Alcohol	REYES, VALERIE
Serve Guam Commission	Nutrition	BAUTISTA, DUSTIN
Seventh Day Adventist Clinic Wellness Center	Physical Activity	JANOS, LEAH
	Physical Activity	SIM, CANDY
	Physical Activity	TAITAGUE, BERNIE
St. Francis School	Nutrition	MARTINEZ, BECKY
	Nutrition	MARTINEZ, NOEL
Strides for the Cure	Physical Activity	BAKER, DONNA
	Physical Activity	GAZA, KRISTA
SYNAPTIX	Tobacco	ZUASULA, JUNJIE
Twice Born Productions	Communication/Media	TINKHAM, NEIL
UDM Coaching		DAVI-MYERS, URSUŁA
University of Guam	Nutrition	ACOSTA, MARK
	WWP/HC	ADA, ANTHONY JOHN
	Nutrition	AUYONG, MARIE
	Nutrition	BARBER, BOB
	Policy & Advocacy	BORJA, ALICIA

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
Iniversity of Guam	Physical Activity	CAMACHO, DAVID
	Policy & Advocacy	CRUZ, KAREN
	Nutrition	DECASTRO, RYNETTE
	Data & Surveillance	DOMINGUEZ, DUANE
V OK VOL	Physical Activity	HATTORI-UCHIMA, MARGARET
	Physical Activity	IRIARTE, IAN
	Communication & Media	KERRY, LUCYANN
	WWP/HC	MENDIOLA, GLORIA
	Tobacco	MUMMERT, ANGELINA
	Physical Activity	OKUBO, FRANCES
	Physical Activity	PAULINO, RON
	Data & Surveillance	PAULINO, YVETTE
	Data & Surveillance	SANCHEZ, RONNIE
	Communicaton & Media	SOMERA, LILNABETH
	Nutrition	WALL, PHOEBE
	Policy & Advocacy	WOOD, KATHRYN
	Data & Surveillance	YAMANAKA, ASHLEY
	Alcohol	YAMANAKA, REMYLYNN
University of Hawaii	Student	TAITANO, TASI FAITH
US Naval Hospital	Tobacco	MARTINEZ, LUIS
VA Pacific Islands Healthcare System	Nutrition	BURNS, CRAIG
	Nutrition	PALOMO-BURNS, GAUDENCIA
Yeilow Pages Ink	Communication/Media	TRINIDAD, EVELYN
Youth For Youth Live Guam	Alcohol	LEGASPI, MIKAYLA
	Alcohol	RIVERA, CABRINI
	Alcohol	RUPLEY, SEAN
	STAFF- Bureau of Community I	Health Services
	Physical Activity	ALAM, LAWRENCE
	Data & Surveillance	BAUTISTA, JENALYN
	Data & Surveillance	UNCANGCO, ALYSSA
	Administration	DEMAPAN, BRANDON
	Nutrition	SILVERIO, ALEX
	Tobacco	GUERRERO, ELIZABETH
	Nutrition	IMANIL, VENANCIO
	WWP	LUCES, PATRICK

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
	Administration	NARVARTE, KHRYSTHYNN
	Administration	SANTIAGO, CHERISSE
	Alochol	SANTOS, DIANE
	Nutrition	SIŁVERIO, AŁEXIS
	Tobacco	SURLA, CHRISTOPHER
	Policy & Advocacy	TANNER, CHUCK
	Data & Surveillance	UNCANGCO, ALYSSA
	WWP/HC	REYES, WILLIAM
	Nutrition	RAMIREZ, RACHEL
	Policy & Advocacy	PAREJA, VIVIAN
	Administration	CEPEDA, MARIE
	Administration	ESTRADA, ANNABELLE
	Administration	MALANUM, CINDY
	Guam Diabetes Control Coaliti	on Members
Island Foot Specialist	GDCC	SANGALANG, DR. MELINDA B.
University of Guam	GDCC	MENDIOLA, GLORIA
Dr. Keith Horinouchi Weliness Center	GDCC	HORINOUCHI, DR. KEITH
Bureau of Family Health and Health Nursing Services	GDCC	GAY, MARGARITA
Bureau of Primary Care Services	GDCC	UNPINGCO-DENORCEY, LINDA
Division of Senior Citizens	GDCC.	SILOS, BERT
Guam Memorial Hospital	GDCC	PORICIONCULLA, LUCILLE
Mayor's Council of Guam	GDCC	GUMATAOTAO, VICENTE B.
Guam Diabetes Association	GDCC	BUTLER, WINNIE
Guam Diabetes Association	GDCC	BUTLER, CARL
Guam Diabetes Association	GDCC	TAITAGUE, JOE
Guam Diabetes Association	GDCC	DUENAS, SCOTT
TakeCare Health Insurance	GDCC	GONZALES, DOMINIJOY
TakeCare Health Insurance	GDCC	LITTLE, DONABEL
NetCare Health Insurance	GDCC	DONINGO, ALMA
Health Partners , LLC	GDCC	RUBIO, DR. JOEL
Health Partners , LLC	GDCC	DAVID, DR. ANNETTE
Mountain Pacific Quality Health Founda- tion	GDCC	ROJAS, JINA
Mountain Pacific Quality Health Founda- tion	GDCC	ALMONTE, GLYNIS
Lifestyle Disease Prevention & Control Program	GDCC	CASTILLO, ARCY
Department of Education	GDCC	QUINATA, BOBBIE
DPHSS	GDCC	SILOS, ALBERT
Naval Hospital	GDCC	OTT, SARAH R. LT

**ACKNOWLEDGEMENTS** 

DEPT/AGENCY/ORGANIZATION	NCD GROUP	NAME
1SP	GDCC	WHITE, AGNES
Retired Nurse	GDCC	MANIBUSAN, NENITA
letiree	GDCC	PURUGGANAN, BARBARA
Guam Regional Medical City	GDCC	PEREZ, MARIBEL ISABEL
Retina Vitreous Consultants	GDCC	PAULIN, MARIE
Vaval Hospital	GDCC	CARBULLIDO, FAY
Naval Hospital	GDCC	SWEARINGER, CHARLES A. LT
Naval Hospital	GDCC	QUIMBY, STEPHEN H.HM3
Guam Diabetes Prevention & Control Program	GDCC	TAITAGUE, RENEE
32nd Guam Legislature	GDCC	CRUZ, NICOLE
Guam Diabetes Prevention & Control Program	GDCC	LUCES, PATRICK
STRIVE Program	GDCC	NARVARTE, KHRYSTHYNN
UOG Intern	GDCC	SANCHEZ, RONNIE
UOG Intern	GDCC	FENG, AMY
Get Healthy Guam! Coalition /Guam Memorial Hospital Authority	GCCC Coalition	Veksler, Renee
BCHS/DPHSS	GCCC Coalition	Zabala, Roselie
Guam Comprehensive Cancer Control Program/ BCHS/ DPHSS	GCCC Coalition	Alam, Lawrence
Guam Comprehensive Cancer Control Program/ BCHS/ DPHSS	GCCC Coalition	Pareja, Vivian
	Guam Comprehensive Cancer C	ontrol Coalition
American Cancer Society	GCCC Coalition	Artero, Marisha
Guam Cancer Registry, UOG	GCCC Coalition	Bordallo, Renata
Health Partners, LLC	GCCC Coalition	David, Annette M. MD
Associate Professor of Psychology, UOG	GCCC Coalition	Ehlert, Michael PhD
Bureau of Family Health & Nursing Services, DPHSS	GCCC Coalition	Gay, Margarita RN
FHP	GCCC Coalition	Grino, Rose
Guam Cancer Registry, UOG / DPHSS	GCCC Coalition	Haddock, Robert DVM
Guam Breast & Cervical Cancer Early Detection Program, DPHSS	GCCC Coalition	Imanil, Venancio
PIHOA	GCCC Coalition	Mariano, Cerina Y.
Cancer Research Center of Guam, Univer sity of Guam	GCCC Coalition	Mummert, Angelina
School of Nursing, Social Work and Health Sciences / Cancer Research Cente of Guam, UOG	GCCC Coalition	Paulino, Yvette C. PhD
The Doctor's Clinic	GCCC Coalition	Taitano, John Ray MD

# **APPENDICES**

Appendix 1: Community and Clinical Linkages: Guam Comprehensive Cancer Control, Diabetes Prevention and Control, Cardiovascular Disease Prevention and Control

Appendix 2: Website Linkages to Related Guam State Health Plans

Appendix 3: Acronyms

Appendix 4: Pacific NCD Commitment Policies



**Guam Cancer Control Coalition** 

# PACIFIC ISLANDS HEALTH OFFICERS ASSOCIATION (PIHOA)

Fifteen Essential Policies for Reversing the Epidemic of Non-Communicable Diseases in the United States Affiliated Pacific Islands

#### Risk Factor: Tobacco

**APPENDICES** 

Commitment 1: Continue increasing taxes on tobacco products

Commitment 2: Pass and enforce model comprehensive smoke-free air acts

Commitment 3: Ban all forms of tobacco product advertising

Commitment 4: Establish and sustain tobacco cessation programs

#### **Risk Factor: Alcohol**

Commitment 5: Ban all forms of alcohol advertising

Commitment 6: Restrict access to alcohol

Commitment 7: Continue increasing taxes on alcohol

#### **Risk Factor: Poor Nutrition**

Commitment 8: Implement policies that reduce salt consumption

Commitment 9: Implement policies that reduce sugar consumption

Commitment 10: Implement policies that reduce fat consumption

Commitment 11: Implement policies that promote breastfeeding

Commitment 12: Implement policies that promote the production and consumption of local foods.

#### Risk Factor: Lack of Physical Activity

Commitment 13: Develop the built environment to promote physical activity

Commitment 14: Promote physical activity in the work place

Commitment 15: Promote physical activity in the schools

# **APPENDIX 1 - COMMUNITY AND CLINICAL LINKAGES**

**CANCER PREVENTION AND CONTROL** 

WORK GROUP:	GUAM COMPREHENSIVE CANCER CONTROL COALITION				
GOAL:	To reduce cancer deaths 10% by the end of 2018.				
HEALTH INDICATORS	Cancer Incidence				
	Guam Males: 394.1 per 100,000 population (age adjusted)	Guam Females: 263 population (age adj		0	
	(Source: Guam Cancer Facts and Figures, 2003-2007)				
	Adult Cancer PrevalenceGuam Cancer Deaths (age adjuste	<u>d)</u>			
	Guam Adults: 1.8% ever diagnosed with cancer	All ages: 111.1 per 1	100,000 popu	ılation (1)	
	U.S. Adults: 6.6% ever diagnosed with cancer population (2)	Adults (aged 30-69)	133.6 per 1	00,000	
	(Source: BRFSS 2011)(Sources: (1) US DHHS 2010 National Vital Statistics Reports, (2) Guam				
	DPHSS Community Health Assessment [20]	3 unpublished]			
	Cancer Screening Rates - Adults(Source: BRFSS 2010)		Guam	U.S.	
	Breast (Women aged 40+ who have had a mammogram within the past 2 years):		64.4%	75.2%	
	Cervical (Women aged 18+ who have had a Pap test within th	e past 3 years):	67.8%	81.3%	
	Prostate (Men aged 40+ who have had a PSA test within the p	ast 2 years):	28.3%	53.2%	
	Colorectal (Adults aged 50+ who have had a blood stool test	within the past 2 years)	8.5%	17.2%	
- State - Stat	(Adults aged 50+ who have ever had a sigmoidoscopy or colo	noscopy):	37.8%	65.2%	
OBJECTIVES:	Objective 1: To support the Guam Comprehensive Cancer Concert	Advocacy team reach the current USPSTF (US anuary 2014.  Objective to re-establish	neir objective Preventive Se	to insure ervices	
	Objective 3: To support the GCCCC in their activities that increases cancer screening guidelines and services.	ease awareness and kn	owledge on o	current	
STRATEGY(IES):	<ul> <li>To collaborate and work closely with the Guam Comprehensive Cancer Control Coalition and support their efforts in implementing the goals and objectives of their strategic plan which focuses on:</li> </ul>				
	<ul> <li>Preventing and reducing exposure to cancer risk factors;</li> </ul>				
	Promoting a social and policy environment cond	uctive to living health	y lifestyles;		
	<ul> <li>Detecting cancer at the earliest stage;</li> <li>Improving the collection and dissemination of qu</li> </ul>	rality cancer selected	daa		
	Enhancing the quality of life for cancer survivors	rancy, cancer-related (	rata; and		

APPENDICES

Objective 1

To support the Guam Comprehensive Cancer Control Coalition (GCCCC) Screening and Early Detection Action Team (SEDAT) and Policy and Advocacy team reach their objective to insure that 90% of all health clinics will have adopted the current USPSTF (US Preventive Services Task Force) Guidelines by January 2014.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/ TASK	RESOURCES WE HAVE
1. To support GCCCC in their efforts to obtain listings of all primary clinics/individual providers.	GCCCC  NCD Community and Clinical Action Team	People/Partners
	(CCAT) DPHSS BCHS	0.
2. By May 2014, to support the GCCCC in their efforts to obtain copies of the most current USPSTF guidelines through the assistance of community partners.	GCCCC NCD CCAT DPHSS BCHS	People/Partners
3. By July 2013, to support the GCCCC in their efforts to distribute copies of the USPSTF guidelines to all clinics and health care providers.	GCCCC NCD CCAT DPHSS BCHS	People/Partners
4. By September 2013, to support the GCCCC efforts to conduct presentations of guidelines to GMA, GMS, GNA and other organizations for the adaptation and implementation of applicable cancer screenings.	GCCCC NCD CCAT DPHSS BCHS	People/Partners
5. To support the GCCCC efforts to monitor the successful adoption of guidelines by clinics every three months after implementation.	GCCCC NCD CCAT DPHSS BCHS	People/Partners
<ol> <li>To support the GCCCC efforts to establish recognition program for providers/clinics with the highest com- pliance/ adoption rate during the annual December retreat.</li> </ol>	GCCCC NCD CCAT DPHSS BCHS	People/Partners

To support the GCCCC SEDAT in achieving their objective to re-establish the Guam Tumor Board in collaboration with community partners by June 2015.

ΑCTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/ TASK	RESOURCES WE HAVE
To support the GCCCC efforts in conducting research on policies, guidelines, and best practices to establish or re-establish a Guam Tumor Board.	GCCCC NCD CCAT	DPHSS Cancer Control Program GCCCC members NCD CCAT
2. To support the GCCCC efforts to develop a strategic plan to promote and implement a Guam Tumor Board.	GCCCC NCD CCAT	DPHSS Cancer Control Program GCCCC members NCD CCAT

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Partners and community support	GMA, GMS, and GNA  Health Providers and Clinics  Presentations & meetings	Listing of all Primary clinics and providers compiled	January 2014
Sufficient copies of the USPSTF guidelines for distribution to all clinics and health providers.	Not Applicable	Recent copy of USPSTF guide- lines made available	May 2014
Volunteers to distribute the guidelines.	Clinics and health care providers Letters, email, presentations, meetings	Increased knowledge about the USPSTF guidelines. Increased compliance with the guidelines.	July 2013
Volunteers to assist in the presentations  Logistical support	GMA, GMS, GNA  Presentations at organization's monthly meetings	Increased knowledge about the most recent USPSTF guidelines. Implementation of the current standards for screening.	Sept. 2013
Volunteers to conduct follow-up with the clinics and report on findings/ status	Clinics and health care providers  Letters, email, meetings	Monitoring of compliance with guidelines achieved for maximum effectiveness.	Every three months after implementation.
Resources to conduct the retreat  Support to identify the clinics to be recognized	Clinics and health care providers  Certificate or plaque for recognition distributed at retreat  Press release	Clinics/health care providers receive positive recognition for compliance with guidelines.	Every December from 2014 – 2018.
		screening guidelines.	

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Fechnical assistance from DPHSS to identify locales with successful umor boards.	Tumor Boards in other locales Letters and emails	Research successfully conducted.  Model established for Tumor Board.	Jan. – Jun. 2014
olunteers to facilitate and assist to the preparation of the strategic plan.  Health providers with Tumor deard expertise.	Health providers with Tumor Board experience Letters and email	Strategic plan is prepared, endorsed, and implemented. Tumor Board is established.	Jul 2014 – June 2015

APPENDICES

Objective 3 To support the GCCCC in their activities that increase awareness and knowledge on current cancer screening guidelines and

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDI- ENCE, MESSAGE, METHOD OF COM- MUNICATION	OUTCOME(S)	TIMEFRAME FOR COM- PLETION
1. To collaborate with the GCCCC in continuing to support policies, activities, and various strategies that will increase and improve access and utilization of cancer screening services on Guam.	GCCCC NCD CCAT	DPHSS Cancer Control Program GCCCC members NCD CCAT and P&A	Resources to conduct awareness campaign and support for integrat- ing Policy/ System and Environ- ment (PSE) Changes in cancer prevention, early detec- tion, and screening.	GCCCC members Health care providers Clinics	Increased access to and utilization of cancer screening services in line with guidelines. Integration of PSE into planning and implementation of cancer programs.	Ongoing
2. To collaborate with the GCCCC in continuing to support activities that increase awareness and knowledge of current cancer screening guidelines and services.	GCCCC NCD CCAT	DPHSS Cancer Control Program GCCCC members NCD CCAT and Communications Action Team	Resources to conduct awareness campaign on guide- lines.	Clinics and health care providers Letters, email, meetings	increased awareness of cancer screen- ing guidelines. Increased adherence to guidelines.	Ongoing

# DIABETES PREVENTION AND CONTROL

WORK GROUP:	Guam Diabetes Control Coalition (GDCC)				
GOAL:	To reduce diabetes deaths and morbidity 10% by the end of 2018.				
HEALTH INDICATORS:	Adult Diabetes Prevalence	Guam Diabetes Deaths (age adjusted)			
	Guam Adults: 9.9% ever diagnosed with diabetes U.S. Adults: 9.5% ever diagnosed with diabetes (Source: BRFSS 2011)	All ages: 37.1 het 100/000 bobgiegon/17	JSA; 20.8 JSA: 20.8		
OBJECTIVES:	Objective 1: GDCC will ensure 75% of all he American Diabetes Association December 2018.	alth clinics will have adopted and practiced at a minimu o (ADA) Recommended Standards of Care by the end of	um the		
	Objective 2: GDCC will conduct train the train management to promote self-diabetes.	ainer trainings for health professionals for diabetes monitoring and self-management by individuals afflicte	ed with		
	Objective 3: GDCC will reach out to educat patients, and their families/cal December 2018.	e individuals newly diagnosed with diabetes, 75% of cu regivers on the ADA diabetes standards of care by the e	urrent and of		

#### STRATEGY(IES):

Collaborate and work closely with the Guam community in implementing the diabetes goals and objectives of the 2014-2018 strategic plan which focuses on:

- preventing and reducing exposure to diabetes risk factors;
- Promoting a social and policy environment conductive to living healthy lifestyles;
- Detecting diabetes at the earliest stage;
- o Improving the collection and dissemination of quality, diabetes-related data; and
- Enhancing the quality of life for individuals living with diabetes.

Objective 1 GDCC will ensure that 75% of all health clinics will have adopted and practiced at a minimum the American Diabetes Association (ADA) Recommended Standards of Care by the end of December 2018

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDI- ENCE, MESSAGE, METHOD OF COM- MUNICATION	OUTCOME(S)	TIMEFRAME FOR COM- PLETION
1. To conduct a survey to identify clinics who are currently practicing ADA standards of care.  a. Recruit Consultant to conduct survey and complete survey report.	GDCC Data Action Group NCD Clinical and Community Action Team J. Rojas, D.	Group  NCD Clinical and Community Action Team  Partners DPHSS Di-	Consultant and re- sources for consultant	GMA, GMS, and GNA, Health Providers and Clinics Presentations & meetings	Completed survey of all Primary clinics and provid- ers practicing ADA stan- dards of care.	Sept. 2014
	Gonzales, A. Uncangco, Dr. Y. Paulino, F. Carbullido, P. Luces, Evelyn Wildi DPHSS BCHS	abetes Prevention & Control Program; GDCC members, Guam Diabetes Association, Health Care Partners, Inc., GMA, GMS, Guam Medical Board, Mountain Pacific Quality Health			Data Report completed and dissemi- nated.	Nov./Dec. 2014
2. Collaborate with GMA and GMS leaders to encourage members to participate in the survey.	GDCC Members (Dr. Sangalang, A. White, G. Mendiola, Dr. A. David)	DPHSS DPCP and GDCC members (Dr. K. Horinouchi, M. Gay, L. Upingco- Denorcey, L. Porcioncula, N. Manibusan, B. Purugganan, L. Alam, G. Almonte)	Resources for consul- tant	GMA and GMS  Presentations, email, and meetings	Support from GMA and GMS.	Jun. – Sept. 2014
3. Collaborate with health insurance companies to encourage activation of wellness program for individuals with diabetes.	Health Insur- ance Advocate (P. Lujan) NCD Consortium & partner advo- cacy groups	Same as above in addition to include M. Perez (GRMC), P. Lujan & C. Calvo-Smith (SC) and G. Mendiola  GDCC insurance representatives	Support of GDCC mem- bers and insurance representa- tives	Health insurance companies  Presentations, email, and meetings	Increased knowledge about and support for wellness pro- gram.	Mar. 2015

Objective 2 GDCC will conduct train the trainer trainings for health professionals for diabetes management to promote self-monitoring and self-management by individuals afflicted with diabetes.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE
Create diabetes education programs that are culturally appropriate and respectful of traditions.	GDCC Members (Dr. Sangalang, A. White, G. Mendiola, G. Almote, Dr. J. Rubio)	GDCC members
2. Coordinate the implementation of the University of Pittsburgh plan or equivalent for training instructors.	GDCC Members (Dr. Sangalang, A. White, G. Mendiola, W. Butler, J. Taitague)	GDCC members (Dr. K. Horinouchi, M. Gay, L. Upingco-Denorcey, L. Porcioncula, N. Manibusan, B. Purugganan, L. Alam, G. Almonte, and M. Perez)

#### Objective 3

GDCC will reach out to educate individuals newly diagnosed with diabetes, 75% of current patients, and their families/caregivers on the ADA diabetes standards of care by the end of December 2018.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE
1. Coordinate contact with groups and populations such as social clubs, church/faith based groups, consulates, Government of Guam employees association and health coaches, elderly community, and so on, to conduct diabetes education.	GDCC Members (Dr. Sangalang, A. White, G. Mendiola, W. Butler, D. Little, B. Silos, Mayor V. Gumatao- tao, Mayor M. Savares, Mayor C. Tayama)	DPHSS DPCP and GDCC members (M. Paulin, M. Gay, L. Upingco-Denorcey, L. Porcionculla, N. Manibusan, B. Purugganan, A. Castillio, D. Delgado, G. Almonte, and M. Perez)
2. Coordinate use of public service announcements (newspaper, TV commercials, radio, speaking engagements) for diabetes awareness and standards of care.	GDCC Members (Dr. Sangalang, A. White, G. Mendiola, )	Same as above. GDCC Guam Diabetes Association (GDA)
3. Coordinate partnership with Guam Diabetes Association (GDA) and the Community Health Clinics to participate in outreach programs.	GDCC Members (Dr. Sangalang, A. White, G. Mendiola, W. Butler, J. Taitague, L. Denorcey-Unpingco J. Taitague, S. Duenas,)	GDCC GDA NCD Consortium Bureau of Primary Care-Community Health Clinic S. Quimby HM3, C. Swearinger Lt., S. Ott Lt.

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COM- MUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Resources for educational tools	Community and individuals with diabetes and their families/ caregivers  Presentations	Diabetes education program developed/adapted to be culturally appropriate and respectful of traditions.  Self-monitoring and self-management is promoted and compliance is increased.	Instructors meet minimum training standards.
Resources for educational tools	Community and individuals with diabetes and their families/ caregivers  Presentations	Instructors meet minimum training standards.	Annually in March from 2015 to 2018

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COM- MUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Venue to conduct presentations Resources for educational materials	Community, social, faith based, Government of Guam, consulates, veterans groups and organiza- tions Presentations Educational sessions NCD/GDCC outreach events	Increased awareness and knowledge about diabetes and its complications.	Annually in March from 2015 to 2018
Resources for media and print advertisements	Print and broadcast media organizations Community members Letters, emails and meetings with organizations Broadcast and Print media for community	Support from print and broadcast media on diabetes awareness and standards of care.	Annually in March from 2015 to 2018
Resources for educational materials	GDA and community Presentations Print and Electronic Media Campaigns, Social Networking, On-line messaging NCD Consortium meetings and outreach events	Increased knowledge and awareness of diabetes and standards of care.	Annually in March from 2015 to 2018

## CARDIOVASCULAR DISEASE PREVENTION AND CONTROL

WORK GROUP:

CARDIOVASCULAR DISEASES (CVD) - PREVENTION AND CONTROL

GOAL:

**APPENDICES** 

To reduce heart disease and stroke deaths 10% by the end of 2018.

HEALTH INDICATORS: Adult Heart Attack Prevalence (Source: BRFSS 2011)Coronary Heart Disease Deaths (age adjusted)

Guam Adults: 3.1% ever diagnosed with heart attack U.S. Adults: 4.4% ever diagnosed with heart attack

Coronary Heart Disease Deaths (age adjusted)

Guam All ages: <u>254.9</u> per 100,000 population (1) Guam Adults (aged 30-69): <u>223.1</u> per 100,000 population (2) USA: <u>179.1</u> USA: <u>218.2</u>

% of Adults Had Cholesterol Checked (Source: BRFSS 2011)

Guam Adults: <u>61.9%</u> who had cholesterol checked within 5 yr. period U.S. Adults: <u>75.5%</u> who had cholesterol checked within 5 yr. period

% of Adults had been told they have High Blood Cholesterol

Guam Adults (18 and older): 33.1% (BRFSS 2011)
U.S. Adults (18 and older): 38.4% (BRFSS 2011)

Guam Adults (aged 30-69): <u>24.4%</u> (2) U.S. Adults (aged 30-69): <u>38.4%</u> (2)

Adult Stroke/Cerebrovascular Disease Prevalence (Source: BRFSS 2011)

Guam Adults: 3.2% ever diagnosed with stroke U.S. Adults: 2.9% ever diagnosed with stroke

Stroke/Cerebrovascular Disease Deaths (age adjusted) (1)

Guam: 71.6 per 100,000 population U.S.: 39.1 per 100,000 population

% of Adults had been told they have High Blood Pressure

Guam Adults (18 and older): 20.8% (BRFSS 2011) U.S. Adults (18 and older): 30.8%(BRFSS 2011) Guam Adults (aged 18-64): 22.2% (2) U.S. Adults (aged 18-64): 30.9% (2)

Note: (1) US DHHS 2010 National Vital Statistics Report; and (2) Guam DPHSS Community Health Assessment 2009 data [presented Oct. 2013, unpublished]

OBJECTIVES:

Objective 1: By December 2014, to implement the Package of Essential NCD (PEN) Services at Guam's two Regional Community Health Centers.

Objective 2: By the end of December 2015, to prevent and control CVDs through health system strengthening through development of a CVD strategic plan.

Objective 3: By the end of December 2016, to facilitate community-clinical linkages which improve the prevention and management of CVDs.

STRATEGY(IES):

- Review and adopt proven CVD screening guidelines for hypertension and cholesterol, and management tools such as PEN.
- Build capacity of health care providers and clinics to use prooven screening and risk reduction tools.
- Collaborate with DPHSS and health care providers and organizations to promote self-care and management education programs.
- Collaborate among public health and health systems and primary care clinics to advance system changes that improve the delivery of screening and clinical preventice services.
- Coordinate the development of a CVD strategic plan.

#### Objective 1

By December 2014, to implement the Package of Essential NCD (PEN) Services at Guam's two Regional Community Health Centers.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE	RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
1. To incorporate Package of Essential NCD (PEN) Services into DPHSS Commu- nity Health Center's primary care by the end of Dec. 2017.	DPHSS Bureau of Community Health Ser- vices (BCHS)  DPHSS Bureau of Primary Care Services (BPCS)	DPHSS Northern and South- ern Regional Community Health Cen- ters (CHC)	Resources for training in PEN services and funding for equipment and supplies to support implementation  World Health Organization (WHO) funding, technical assistance and training	DPHSS Director, CPHO, BPCS management, primary care physicians, nurses and staff, CHC Regional Board members	Support from DPHSS is garnered.  Regional CHCs fully implement PEN.  With the PEN	Jan. 2014 – Dec. 2014
			Buy-in from DPHSS Director, Chief Public Health Of- ficer (CPHO), BPCS management, CHC primary care physi- cians, nurses, staff and Board members	Presentations, email, and meet- ings	adopted, high risk CVD patients are more read- ily identified and appropri- ate referrals made for their care.	
2. To conduct PEN Training in collaboration with the Guam Nurses' Association	DPHSS BCHS	WHO	WHO Funding, tech- nical assistance	Clinicians and other healthcare providers on Guam	Adoption and imple- mentation of CVD diseases	February 2014 and September 2014
(GNA), the Guam Medical Society (GMS) and the Guam Medical Association (GMA) by the end of December 2014.	DPHSS BPCS WHO		PEN Training materials  Buy in from GMA,	Presentations, email, and meet- ings	assessment tools and appropriate referrals are made timely.	2014
	DPHSS BNS, Lifestyle Dis- ease Preven- tion and Con- trol Program (LDPCP)		GMS and GNA		Training is completed and capacity is built for instituting PEN.	

#### **OBJECTIVE 2**

By the end of December 2015, to prevent and control CVDs through health system strengthening through development of a CVD strategic plan.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE
<ol> <li>To develop a strategic plan for CVD prevention and control under the lead of DPHSS.</li> <li>a. Conduct assessment of CVD programs and resources on Guam.</li> <li>b. Mapping of resources available.</li> <li>c. Survey primary clinics to determine screening and treatment guidelines being utilized and identify those using the USPSTF CVD standards of care.</li> <li>d. Form a CVD planning work group.</li> </ol>	DPHSS BCHS  DPHSS Bureau of Primary Care Services (BPCS)	DPHSS Preventive Health Block Grant Program (PHB)  DPHSS Northern and Southern Regional CHCs
2. To provide leadership and examples of whole-of-organization approaches to CVD prevention and control such as community gardens, healthy workplaces, healthy schools, safe paths to school, and so on.	NCD Consortium Steering Committee  DPHSS BCHS	NCD Consortium members  NCD Communications Action Team (CAT)

#### **OBJECTIVE 3**

By the end of December 2016, to facilitate community-clinical linkages which improve the prevention and management of CVDs.

ACTIVITY	LEAD ORGANIZATION(S) & KEY MEMBER(S) TO ASSIST WITH ACTIVITY/TASK	RESOURCES WE HAVE
To determine appropriate self-care and management education programs for CVDs (heart disease and stroke) and promote its use islandwide.	DPHSS BCHS and BPCS, CPHO	DPHSS CHCs
2. To conduct targeted outreach to people at risk for heart disease and stroke to adopt USPSTF guidelines for adults on use of aspirin.	DPHSS BCHS and BPCS and BNS/ LDPCP	NCD Consortium members and partner organizations
3. To review and adopt proven screening guidelines for hypertension/ high blood pressure and cholesterol.	DPHSS BCHS and BPCS and BNS/ LDPCP	NCD Consortium members and partner organizations

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COM- MUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
Funding resources for planning, development and implementation of strategic plan	DPHSS Director and management team DPHSS BPCS and BCHS  Primary Care clinics and physicians	Strategic plan completed and funding secured for implementation.	Sept. 2014
		Assessment and mapping of resources completed.	
	Meetings, presentations, letters, email	Completed survey of all Primary clinics and providers and standards of care being practiced are identified.	Nov/Dec. 2014
		CVD Planning group formed and working to oversee CVD plan.	
Resources to publicize accomplishments of NCD Programs and market 'success stories' for community buy-in	Community at large  Press releases  Feature stories for TV and print media	Increased community awareness of CVD risk reduction program successes and "best practices."	01/01/2014 -12/31/2018

RESOURCES NEEDED	TARGET AUDIENCE, MESSAGE, METHOD OF COMMUNICATION	OUTCOME(S)	TIMEFRAME FOR COMPLETION
GMA, GMS,  American Heart Association (AHA)  WHO  Funding and technical resources who are knowledgeable about and target CVD prevention and health promotion  Guam Regional Medical City (GRMC)	GMA GMS, AHA, GRMC, WHO Letters, emails, presentations	Better quality of life through self-management and compliance.  Increased knowledge of self-care and management among people living with CVD.  CVD education program developed/adapted to be culturally appropriate and respectful of traditions.	Jan. 2015 – Dec. 2016
Funding for educational materials, spot announcements on radio and TV  Endorsement and adoption of USPSTF guidelines by primary care physicians and clinics.	Primary care clinics and physicians, GMA, GMS, DPHSS CHCs	Increased knowledge and awareness of benefits of adopting USPSTF guidelines on aspirin use for adults.  Reduced risk of heart attack/myocardial infarctions (men) and ischemic stroke (women).	Jan. 2014 – Dec. 2016
Endorsement and adoption of proven guide- lines by primary care physicians and clinics.	Primary care clinics and physicians, GMA, GMS, DPHSS CHCs	Early detection and screening guidelines have been adopted.  Uniform screening guidelines followed.	Jan. 2014 – Dec. 2016



**Government of Guam Worksite Wellness Program Health Coaches** 

**APPENDICES** 

#### APPENDIX 2 WEBSITE LINKAGES TO RELATED STATE HEALTH PLANS

Five-year Prevention Education and Community Empowerment (PEACE) Strategic Plan 2014-2018 can be found at:

[http://www.peaceguam.org/Prevention/docs/SPF-SIG/PEACE\_SPE5-YearComprehensiveStrategicPlan\_FINAL.PDF]

The Guam NCD Strategic Plan 2010-2013 can be found at: http://www.livehealthy.guam.govor http://www.dphss.guam.gov

The Guam Comprehensive Cancer Control Plan 2007-2013 can be found at: http://www.livehealthy.guam.gov or http://www.dphss.guam.gov

The Guam Diabetes Prevention and Control Plan 2010–2013 can be found at: http://www.livehealthy.guam.gov or http://www.dphss.guam.gov

The Guam Preventive Health Block Grant Action Plan 2013 can be found at: http://www.livehealthy.guam.gov or www.dphss.guam.gov

Guam Community Health Assessment (CHA) Plan can be found at: http://www.livehealthy.guam.gov or http://www.dphss.guam.gov

#### **APPENDIX 3 ORGANIZATION ACRONYMS**

ACS - American Cancer Society, Guarn Unit

AHA - American Heart Association

BCHS - DPHSS Bureau of Community Health Services

**BOPS** - Bureau of Plans and Statistics

**BPCS - DPHSS Bureau of Primary Care Services** 

CCC - Comprehensive Cancer Control Coalition

CDC – US Centers for Disease Control and Prevention

CHC - DPHSS Community Health Centers

CRC - University of Guam Cancer Research Center

DOE - Department of Education

DoAG - Department of Agriculture

DPHSS - Department of Public Health and Social Services

DPR - Department of Parks and Recreation DRT - Department of Revenue and Taxation

DPCP - DPHSS Diabetes Prevention and Control Program

GMS - Guam Medical Society

DYA - Department of Youth Affairs

EFNEP - University of Guam Expanded Food and Nutrition Education

FHWA – Federal Highway Administration

GBHWC - Guam Behavioral Health and Wellness Center

GCCCC - Guam Comprehensive Cancer Control Coalition

GCC - Guam Community College

GCPF&S - Governor's Council on Physical Fitness and Sports

GDA - Guam Diabetes Association

GDCC - Guam Diabetes Control Coalition

GHGC - Get Healthy Guam Coalition

GHRA - Guam Hotel and Restaurant Association

GMA - Guam Medical Association

GMHA - Guam Memorial Hospital Authority

GSR - Guam Sunshine Rotary Club

GUNG - Guam National Guard

GVB - Guam Visitors Bureau

HRRA - Hagatna Restoration and Redevelopment Authority

JSN - Just Say No Dance Crew

LDPCP - DPHSS Lifestyle Disease Prevention & Control Program

MADD - Mothers Against Drunk Driving

MCH - DPHSS Maternal and Child Health Program

OMH - DPHSS Office of Minority Health

P & A - Policy and Advocacy Action Team

PEACE - Prevention, Education and Community Empowerment Office of

the GBHWC

PTO - Parents Teachers Organization

SPC - Secretariat of the Pacific Community

UOG - University of Guam

UOG CES - University of Guam Cooperative Extension Service

UOG CES ANR - University of Guam Cooperative Extension Program

Agriculture and Natural Resources

UOG CHL - University of Guam Children's Healthy Living Program

UOG CRC - University of Guam Cancer Research Center

USPSTF - US Preventive Service Task Force

WHO - World Health Organization

WIC – DPHSS Supplemental Nutrition Program for Women, Infants and

WWP - Worksite Wellness Program

YFYLG - Youth for Youth LIVE! Guam organization

#### **ACRONYMS**

BF - Breast Feeding

BRFSS - Behavioral Risk Factor Surveillance System

BTI - Brief Tobacco Intervention Training

CMAT - NCD Communications/Media Action Team

CBOs - Community Based Organizations

CCAT - NCD Community and Clinical Action Team

CHA - Community Health Assessment

CLAS - Culturally, Linguistically Appropriate Services

COA - Certificate of Accreditation

CPHO - Chief Public Health Officer

CSA - Community Supported Agriculture

CVD - Cardiovascular Disease

CWEPs - Community Worker Experience Program

DCP - Diabetes Control Program

EO - Executive Order

EPCC - DPHSS Early Prenatal Care Class

F & V - Fruits and Vegetables

GCA ~ Guarn Code Annotated

GYTS - Global Youth Tobacco Survey

HR - Human Resources

HUSSC - Healthier US School Challenge

LHG - Live Healthy Guam

MOA - Memorandum of Agreement

MOU - Memorandum of Understanding

NCD - Non-Communicable Disease

NGO - Non Government Organization

PE - Physical Education

PC - Program Coordinator

PEN - Package of Essential Services for NCDs

PHB - Preventive Health Block Grant

PNCD - Pacific Non-Communicable Disease

PNP - Private Non-Profit organization

PR - Public Relations

PSA - Public Service Announcement

RBS – Responsible Beverage Service/Servers

SBIRT - Screening, brief intervention referral and treatment

SEDAT - Screening, Early Detection Action Team

SNAPO - Smoking, Nutrition, Physical Activity and Obesity

YRBS - Youth Risk Behavior Survey



#### Membership Application

The Guam Non-Communicable Disease (NCD) Consortium envisions that people of Guam will be free of Non-Communicable Diseases, embracing a healthy lifestyle and living in a healthy environment. The Guam NCD Consortium represents a diverse group of public and private sector stakeholders and individuals whose collaborative work identifies methods to reduce the burden of NCDs in Guam. The success of the consortium depends on the commitment and involvement of a broad spectrum of organizations and partners who are willing to share their expertise, resources and experiences with one another. As a member of the Guam NCD consortium, you will:

- Be involved with developing, enhancing, and supporting prevention efforts;
- Be able to network with others in the community that share a strong interest in eliminating NCDs and access related resources and information.

#### WE INVITE YOU TO JOIN US AS WE WORK TO REDUCE THE BURDEN OF NCDS ON GUAM

First Name	M	iddle Initial	Last Name
Mailing Address			
Phone Number	A	ternate Number	Fax Number
Email Address			
I Represent: (Please check all that apply)	)		
□ Individual	☐ Priva	te	☐ Faith Based
Government	☐ Territ	tory/State/Local	☐ Educational
☐ Non-Government Organization	☐ Non-	Profit	Other:
☐ National	☐ Comi	munity-Based	
☐ For Profit	☐ Inter	national	
Name of Organization: Position Title: Name and Title of organization Head:			
Yes, my organization/I would like to be a  Alcohol Prevention and Control  Communications and Media  Data and Surveillance  Nutrition  Physical Activity  Policy and Advocacy  Tobacco Prevention and Control  Worksite Wellness Program/ Health Control		informed to my satisfaction personal information about confidence. I understand the	end the NCD Consortium and confirm that I have been n as to the purpose of the event. I understand that t me that I disclose during the events will be kept in at pictures and/or videos may be taken and hereby agree these pictures or videos by the NCD Consortium for ducational purposes  Date:
		Signature	

Ed.9.11.13cbs

# Everyone deserves clean air. Keep all public places tobacco-free –it's the law!

#### **GUAM TOBACCO CONTROL LAWS**

### Public Law 28-80

Clean Indoor Air Act known as the "Natasha Protection Act of 2005." This law prohibits smoking in public places including workplaces, service areas, bus stops, all means of public transport, restaurants, public and government buildings.

#### Executive Order 2007-18

Tobacco Free Workplace Environment. Mandates all Government of Guam workplaces be tobacco free.

## Public Law 30-63

Prohibits smoking within twenty (20) feet of an entrance or exit of a public place where smoking is prohibited.





# LIVE HEALTHY GUAM!

To join the Non-Communicable Disease (NCD) Consortium or for more information, please contact the:

Non-Communicable Disease Control Program
Bureau of Community Health Services
Department of Public Health and Social Services

123 Chalan Kareta, Mangilao, Guam 969 13-6304 Phone: 671-735-7295/7336 • Fax: 671-735-7500 Website: www.livehealthyguam.gov

## **Outcomes Measurement**

**EVALUATION** 

OBJECTIVE	OUTCOMES	ASSESSMENT INSTRUMENT	FREQUENCY
Objective 1: To reduce adult and youth alcohol use rates by 10% by the end of 2018, by creating and implementing a media	Increased server skills in preventing underage drinking and adult binge drinking	Pre- and post-skills checklist	With each RBS training
and social marketing advocacy campaign; and implementing an alcohol server/seller intervention training for business establishments to promote healthy lifestyles and healthy choices among civilian and military communities	Increased community support for alcohol-free events	Annual inventory of alcohol-free events	Annually
Objective 2: To increase the number of policies and laws that directly or indirectly provide resources for prevention and/or create the environmental conditions that encourage healthy choices.	Bill passed into law, increasing taxes on alcohol products	Legislature records  Price comparison of alcohol products, pre and post-law	Pre and post enactment of law
	A portion of alcohol tax revenues earmarked for alcohol prevention	Legislature records	Pre- and post enactment
	P.L. 30-65 expanded to cover 50% of public beaches/parks	Annual inventory of public places covered by policies	Annually
Objective 3: To increase the number of people assessed and referred to treatment and/or receive intervention by establishing a standardized protocol for clinicians to conduct alcohol screening assessments and referrals.	Increased clinician knowledge/skills with increased proper diagnoses for treatment plans by 20% in the first year and increase by 5% every year after.	Pre-and post-knowledge and skills surveys	With each training workshop
	Increased referrals for alcohol treatment	Referrals data review at GBHWC	Annually

#### NUTRITION AND OBESITY PREVENTION

Fruit and vegetable consumption

OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 1: Establish preliminary base line data on family, adult & youth fruit and vegetable daily consumption.	<ul> <li>Fruit &amp; vegetable intake data identified in CDC BRFSS data set for Guam.</li> <li>2 standardized questions on 24-hour fruit &amp; vegetable intake developed for use on partner workshop registration forms.</li> <li>Food &amp; activity journal/logs collected by partner agencies (ex: CHL 900 2-8 year olds)</li> <li>State-added questions on fruits and vegetable intake included in BRFS.</li> <li>Baseline data on fruit &amp; vegetable consumption in Guam established</li> <li>Increased data sets to determine fruits and vegetable intake</li> </ul>	<ul> <li>Increased knowledge of NCD program staff on fruit and vegetable consumption among target audiences</li> <li>Enhanced skills of NCD program staff and Consortium members to provide information on nutritional related behaviors in Guam.</li> </ul>	Enhanced measurement of impact of NCD efforts on releval behavior change indicators     Improved understanding of actual eating behaviors and physical activity of the local population.

	COAM NON-COMM	IUNICABLE DISEASE	STRATEGIC PLAN
OBJECTIVE	OUTPUTS	OUTCOME MEASURES	IMPACT MEASURES
Objective 2 : Increase availability and access to fruits and vegetables for villages and families through market outlet initiatives.	<ul> <li>Village fruit and vegetable outlets increased: Night markets, produce stands and community supported agriculture (CSAs).</li> <li>Collaborative agreements with community partners to increase availability of fresh fruits and vegetables established.</li> <li>Mini-grants to support local fruit and vegetable sources leveraged.</li> <li>Village projects that promote gardens increased.</li> </ul>	variety and ease of access to fruits and vegetables for individuals	Increased consumption of fresh fruits and vegetables     Decreased obesity rate
Objective 3: Increase fruits and vegetable consumption availability and access through sustainable home, community, & school gardening initiatives.	<ul> <li>Demonstration home, community and school gardens established</li> <li>Fruit and vegetable seed/plant exchange for NCD partners and communities set up.</li> <li>Service learning as a method to increase garden projects and curricula to a wider audience utilized broadly in schools.</li> <li>Resource reallocation and accountability of gardening supplies and equipment strengthened.</li> </ul>		<ul> <li>Increased fruit and vegetable supply for families, communities and schools.</li> <li>Decreased price and greater availability will increase fruits and vegetable consumption.</li> <li>Knowledge, attitudes and beliefs of gardens and healthy lifestyles instilled in children at an early age.</li> <li>Sustainability of gardens enhanced.</li> <li>Ownership and buy-in of the community established.</li> </ul>
biective 4: Increase fruit nd vegetable consumption nd demand through ducation and public utreach initiatives.	<ul> <li>Workshops on fruit and vegetable cooking, preservation and nutritional benefits in communities/villages conducted with partner organizations.</li> <li>Guam Gardener educational program developed with partner support</li> <li>NCD program workshops conducted at funded gardens</li> <li>Partnerships with Mayors' Council, Village/Parish News created to promote increased availability, production and access to fruits and vegetables</li> <li>Facebook page and other online/social media with content on fruits and vegetables' importance to healthy eating widely promoted</li> <li>Healthy eating/fruit and vegetable recipe book produced</li> </ul>	Community     assessments show     desire for cooking     classes in the     community.      Increased     awareness and	Increased consumption of fruits and vegetables and physical activity through gardening.  Increased "asking and tasting" behavior of school-age youth Healthy eating habits sustained for low income families.