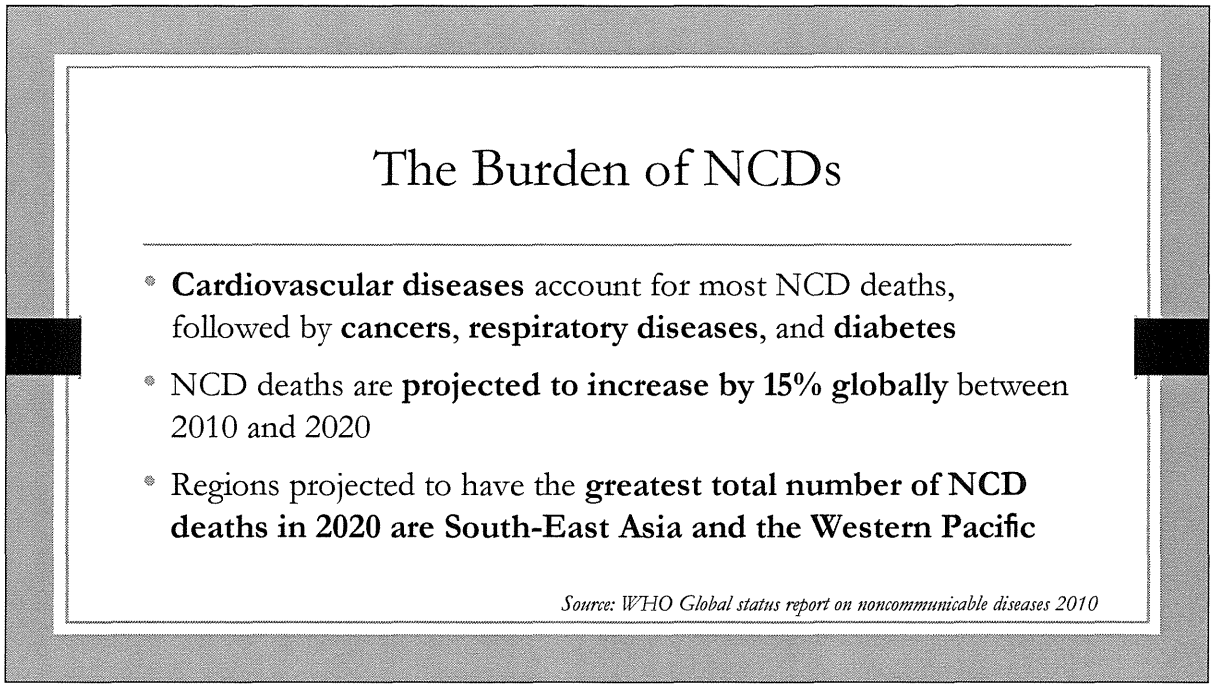
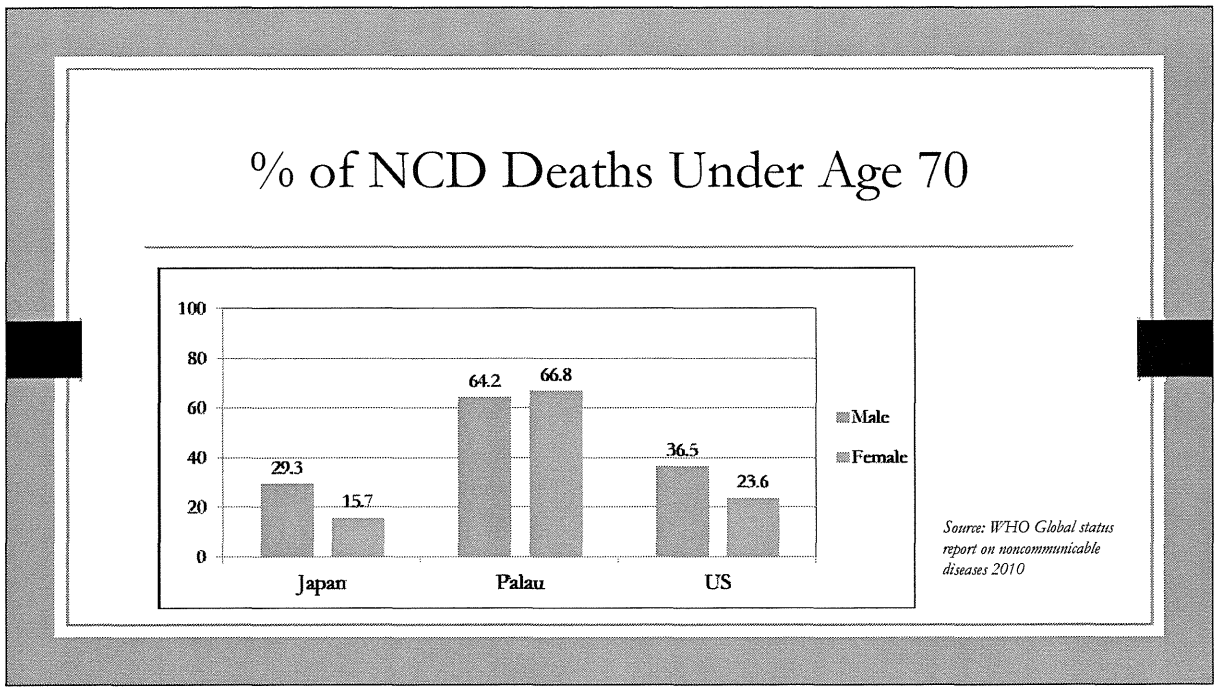


We know of the big four that account for most NCD deaths:
•Cardiovascular diseases,
•followed by cancers,
•respiratory diseases
•and diabetes
•I will show in later slides some mortality data from Palau mirroring these same diseases

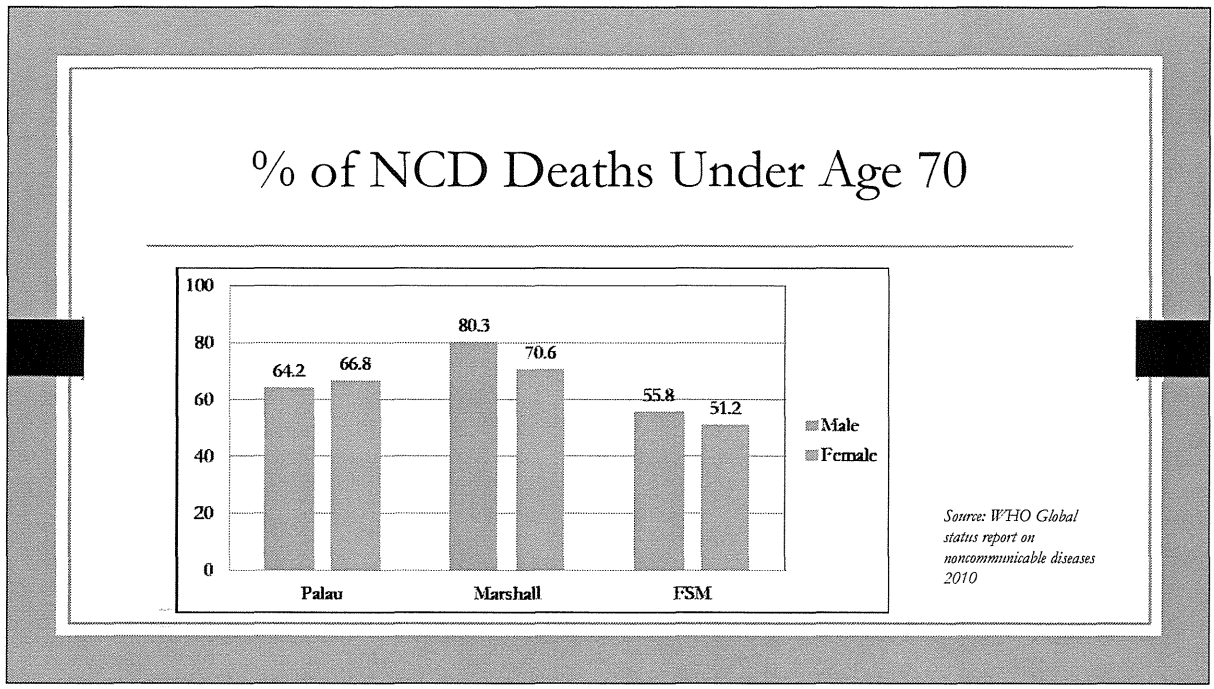
Projected to increase by 15% in the next several years (7) years (2020), the Western Pacific and South East Asia will have the greatest impact.

Again, this is us.



I had wanted to show a little bit of comparison between Palau, the US and Japan as well as within the North Pacific.

This clearly shows that Palau far supersedes both nations as far as the percentage of PREMATURE deaths due to NCDs, for both men and women.



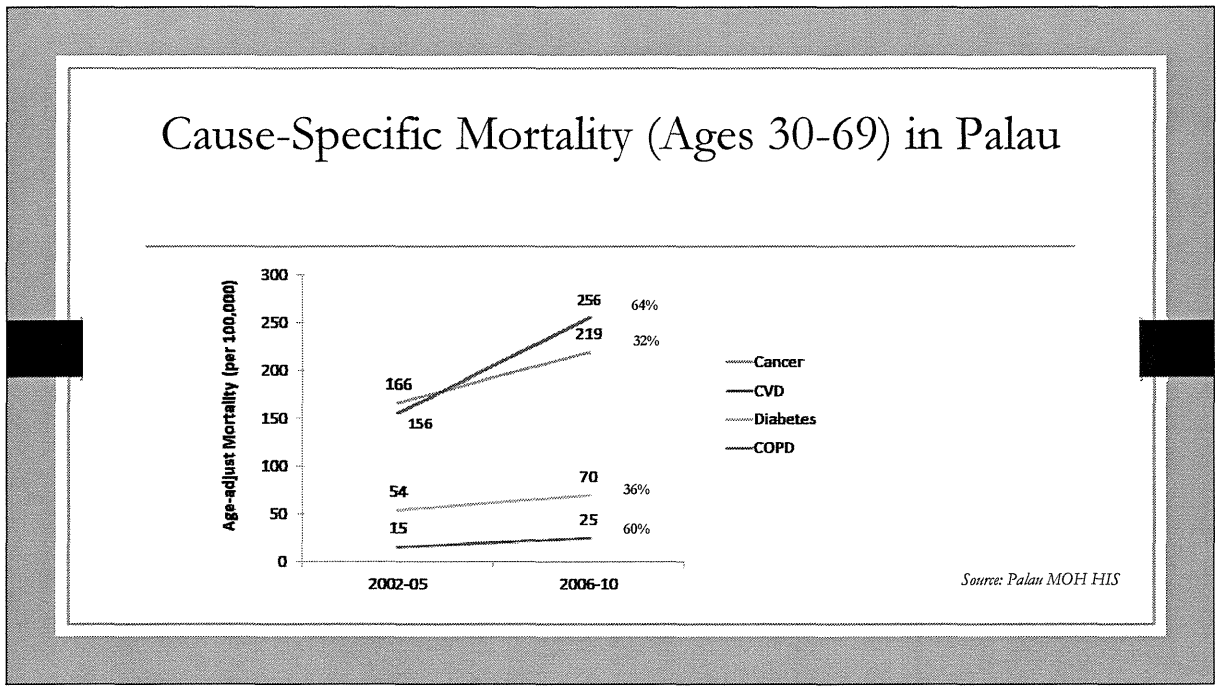
Within the north pacific region, I found two other jurisdictions to compare with Palau. Again, this is what WHO report in its global status report in 2010.

The percentage of premature NCD deaths is a little lower than that of the Marshalls and higher than the Federated States of Micronesia.

BUT CLEARLY, the numbers are staggering,

- more than half of NCD deaths under the age of 70 for FSM
- For Palau, over 60% for both men and women
- And in the Marshall Islands, about 71%for women and 80% for men

Year not clear.

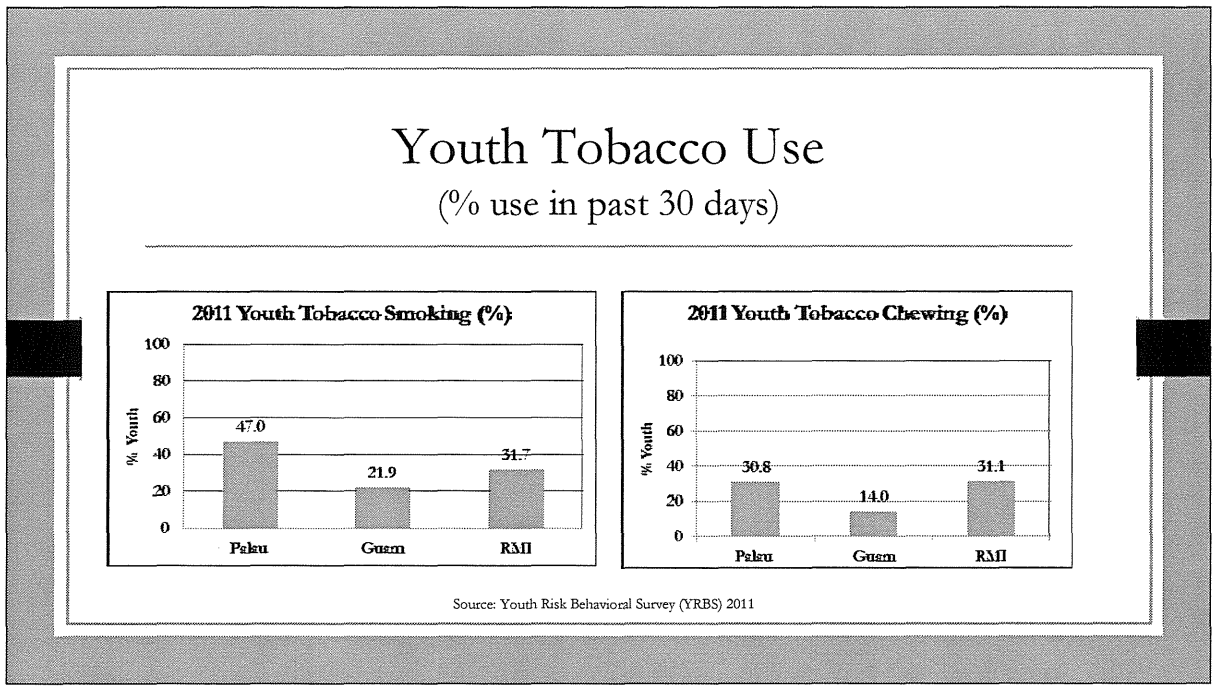


This slide shows cause specific and age-adjusted mortality rates for Palau.

Data was aggregated between the years 2002-2005 and between 2006-2010;

As we can see, the increase has been great:
- 64% increase for CVD
- 32% for cancer
- 36% for diabetes
- 60% for COPD

A couple of points to note:
- We might be seeing these increase in numbers due to better, more complete and accurate death reporting
- We might have to really look closely into risk factor and morbidity prevalence rates to see if there is correlation.



The next several slides will show results from risk behavior surveys for both youth (high school) and adults (specific age group 25-64).

I used data from Palau, Guam, the RMI or Marshalls, and FSM. All these data come from either YRBS or the BRFSS.

Before I continue, Dr. Singeo will give us a brief background on these two behavioral risk surveillance systems.

Tobacco use remains the single most preventable risk factor for many NCDs and most disturbingly the highest in Palau, particularly the youth.

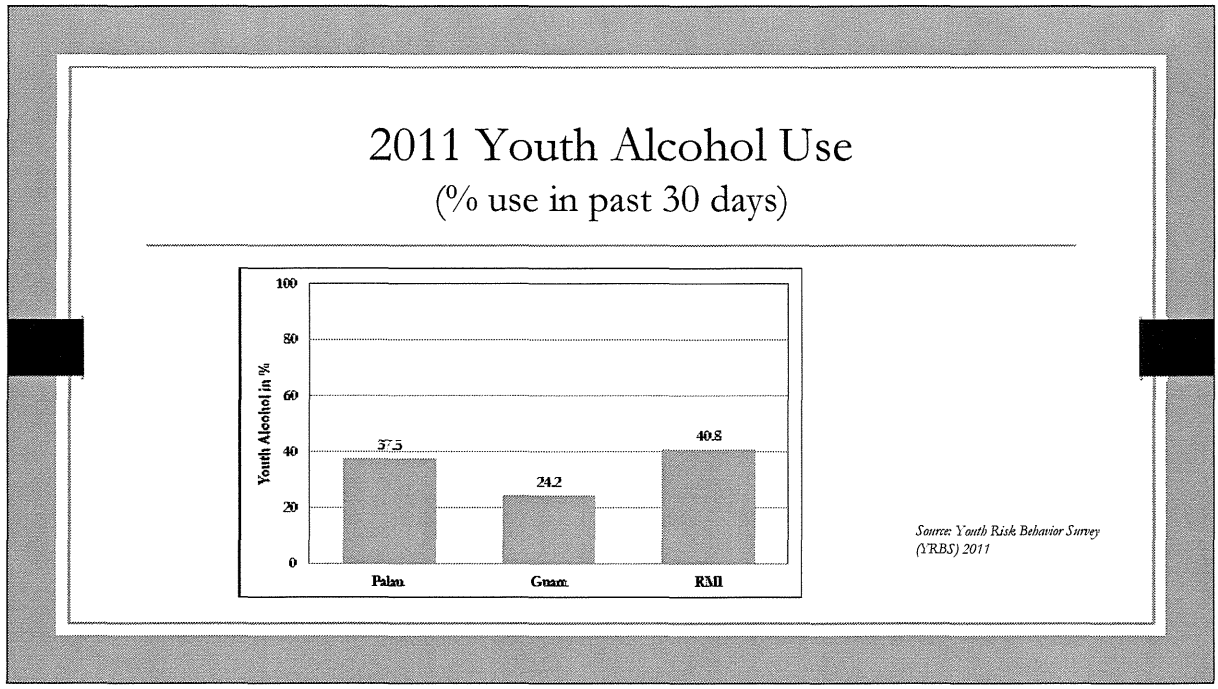
Explain 2 ways Palauans use tobacco: chewing and smoking

I apologize for not making a slide to show trends; but the percentage of youth chewing tobacco has declined over the years; it was at 40% in 2001 and steadily decreased over the years, and now at just a little over 30%

However, Palau has seen an increase in smoking rates. It was at about 39% in 2001 and made its way to 47% as can be seen on this slide.

Younger people –don't want to have stained teeth, want to look cool, cheaper/convenient

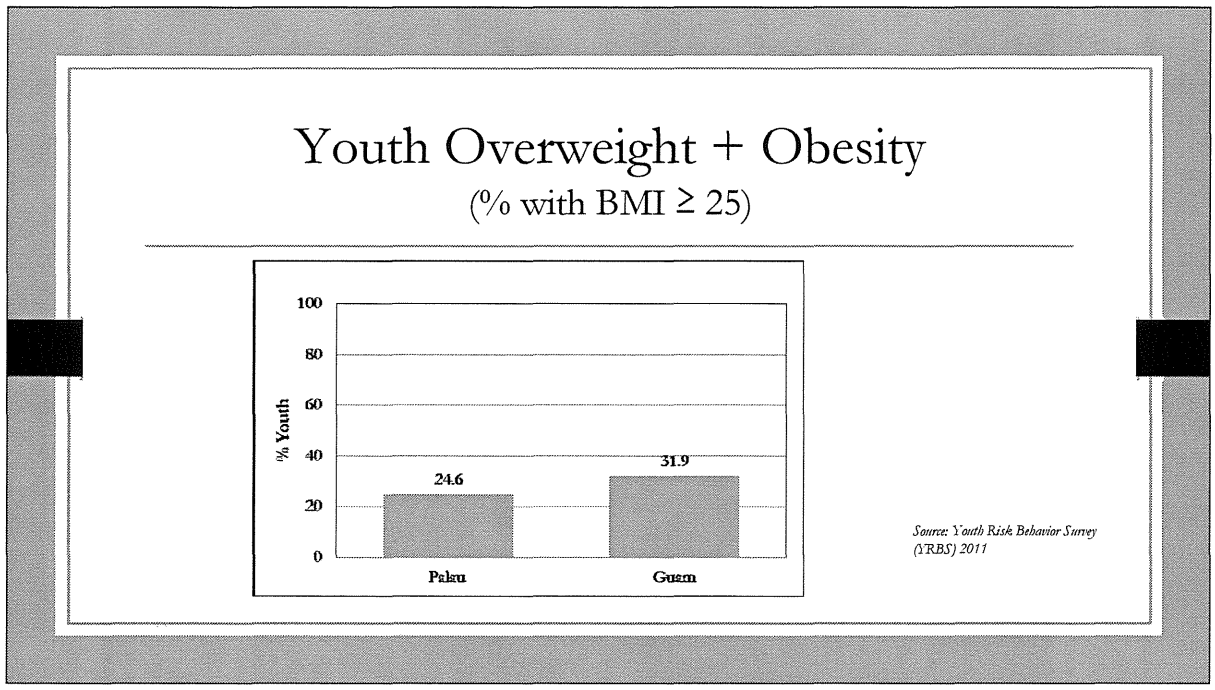
We are hopeful though that with the recent passing of tobacco control laws, we'll be able to see a decline in smoking as we have seen in chewing. I'll talk more about these laws later on.



The percentage of high schools students reporting alcohol use in the past 30 days is 37.5% right behind the Marshall Islands at 40% way above Guam at 24%.

Again, this is a decrease from about 10 years ago. In the early 2000, the rate was at about 47-50% decreased starting 2005 to 2011 and now at 37.5%. Again, I apologize for not making a trends slide, but I can share the data with you if you are interested.

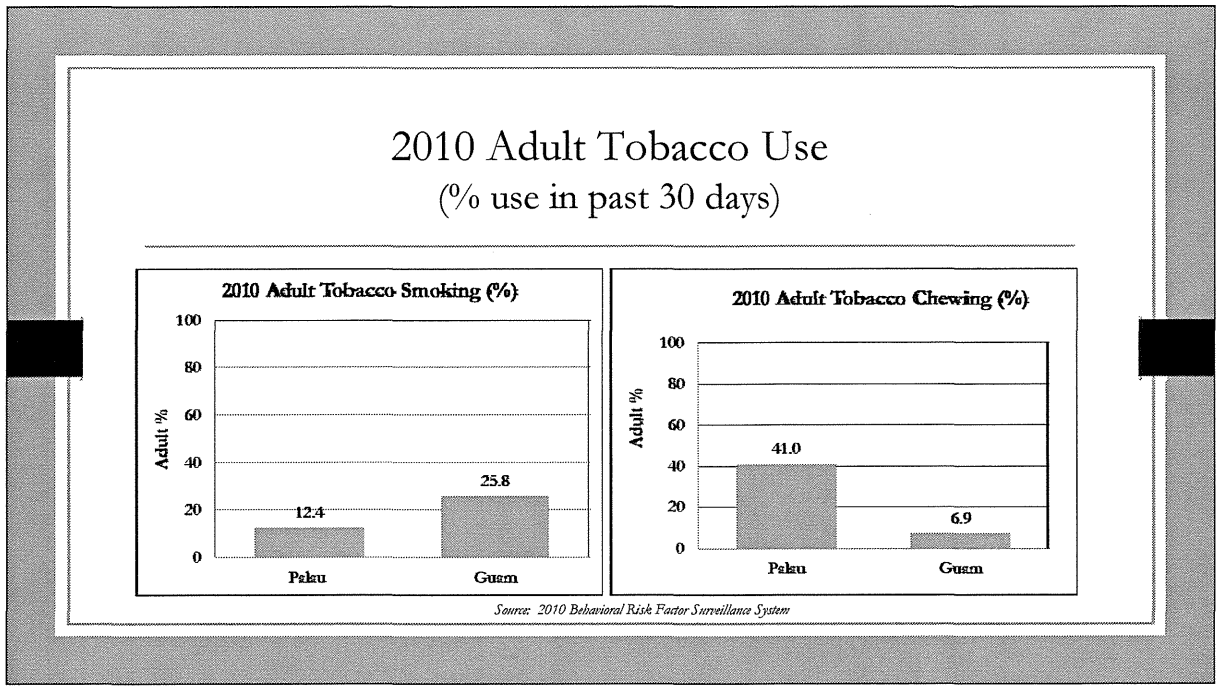
Might be due to strong campaigns which started in the early 2000, utilizing the concept of BUL (Moratorium), traditional/community leadership, DeWill campaign...



The percentage of youth with a BMI of 25 or more is 24.6% as self reported through the YRBS;

however, we also have an annual school health screening that actually physically measure the kids and this reports overweight and obesity rates at 33%, similar to that of Guam.

Already about a quarter to a third of our youth at risk for NCDs.

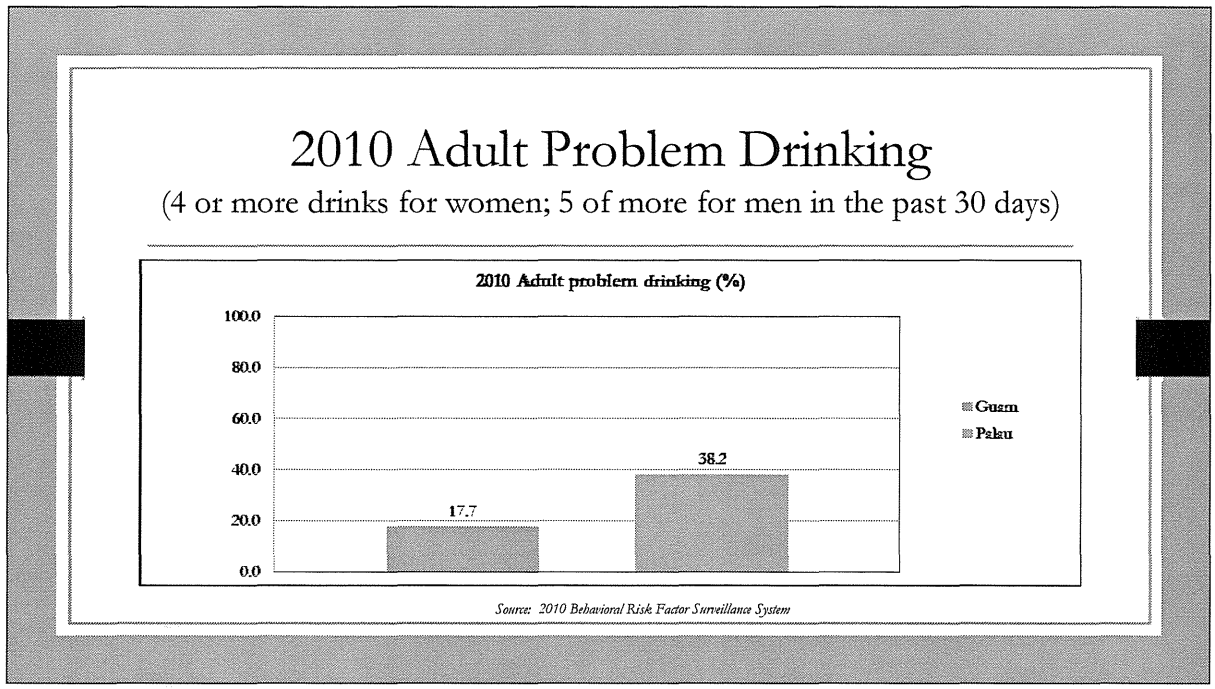


Techong again to give context to BRFSS if not done in previous slide.

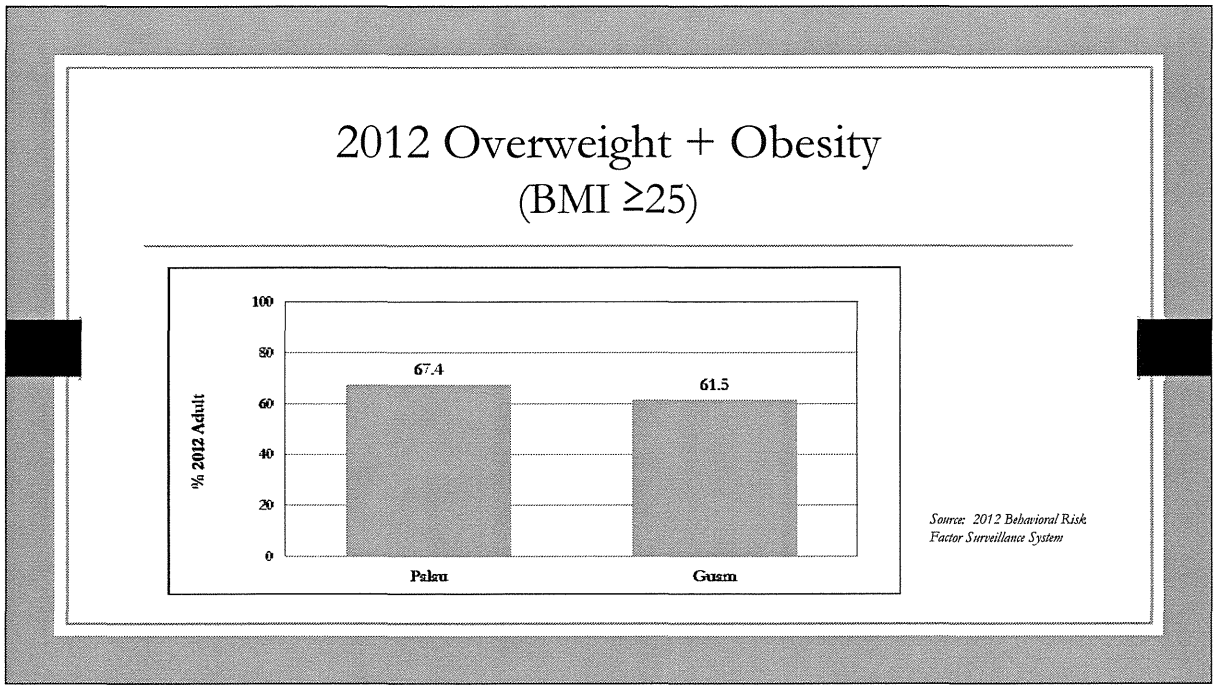
Although Palau reports (self reported) 12% prevalence rate for adult smoking, chewing with tobacco is at 41%. There is a little overlap between smokers and chewers, but very small.

About half of adults use tobacco (either chewing or smoking) in Palau. Because of the methodology used by BRFSS, this may be well underreported.

STEPs might report a rate much higher as did the MINI STEP survey conducted within Ministry of Health, which showed that 2 out of 3 MOH employees use tobacco.



About 40% of the adult population in Palau binge drink (4 or more drinks for women, 5 or more for men in the past 30 days)



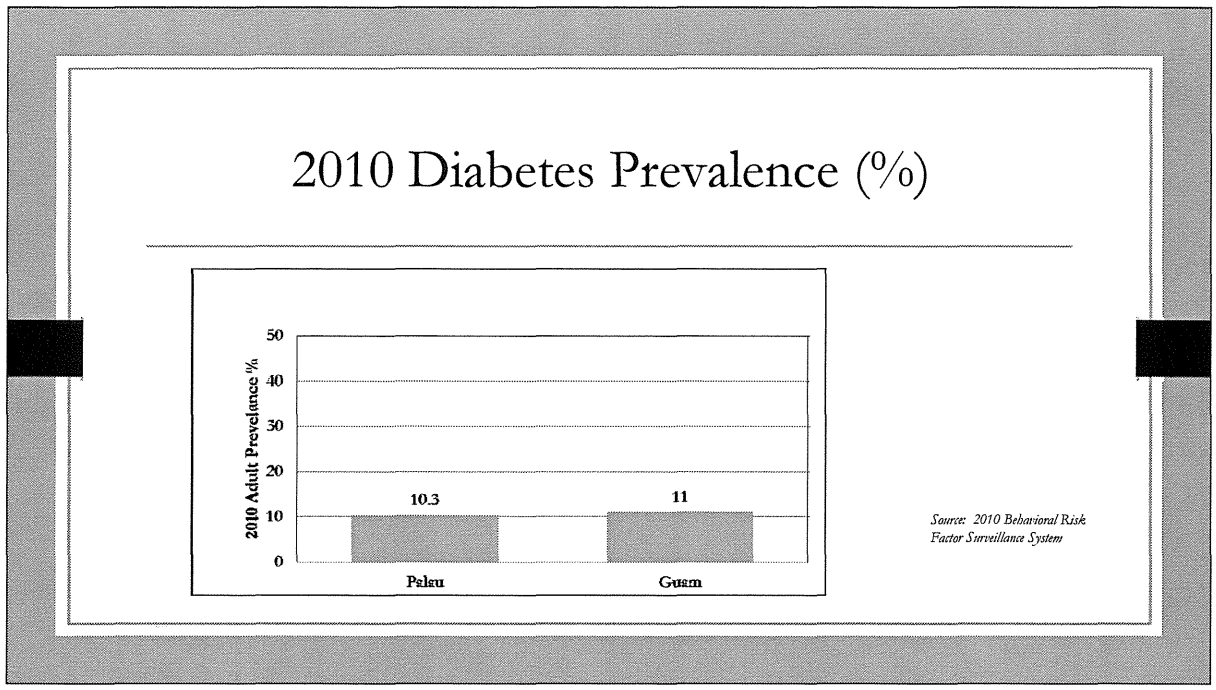
This data come from the most recent completed BRFSS. I didn't use the 2012 data for the previous indicators because the other countries didn't have theirs available yet that I could get.

Based on the 2012 BRFSS results, almost 70% of Palau's adult population is either overweight or obese, with a BMI of 25 or over.

Might be underreported – people might not readily report their weight accurately.

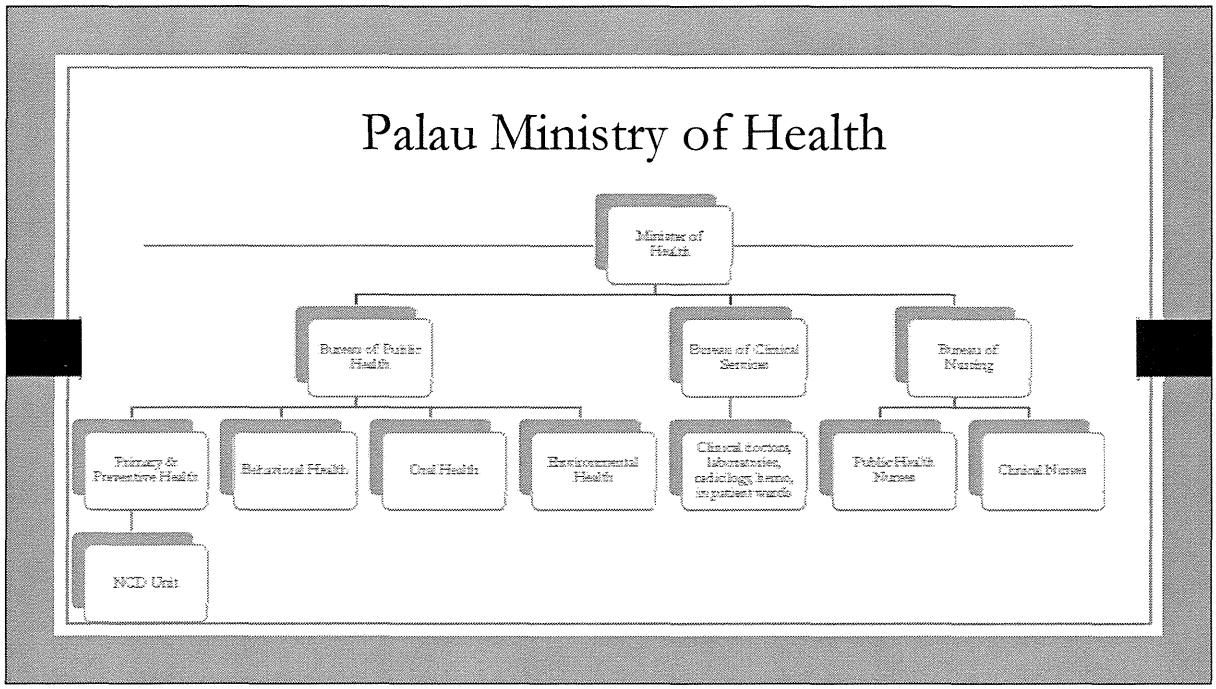
MINI steps survey (explain what this is) reports that 9 out of 10 MOH employees are either overweight or obese.

Again, would be interesting to compare with results from the recently concluded national STEPs survey.



Only morbidity prevalence rate available for Palau is diabetes through the BRFSS, showing a 10% prevalence rate which is somewhat accurate.

Mirrors MOH Mini steps data as well as database for chronic disease at the Belau National Hospital.



As we can clearly see, the burden of NCDs in Palau and it's Pacific neighbors, is overwhelming, among the highest in the world.

Although Palau and the rest of the US affiliated Pacific Islands, Guam, CNMI, RMI, FSM, and American Samoa has come a long way in the last 10 years in our attempts in NCD prevention and control, we haven't been able to see a lot of changes or decrease in NCD morbidity and mortality.

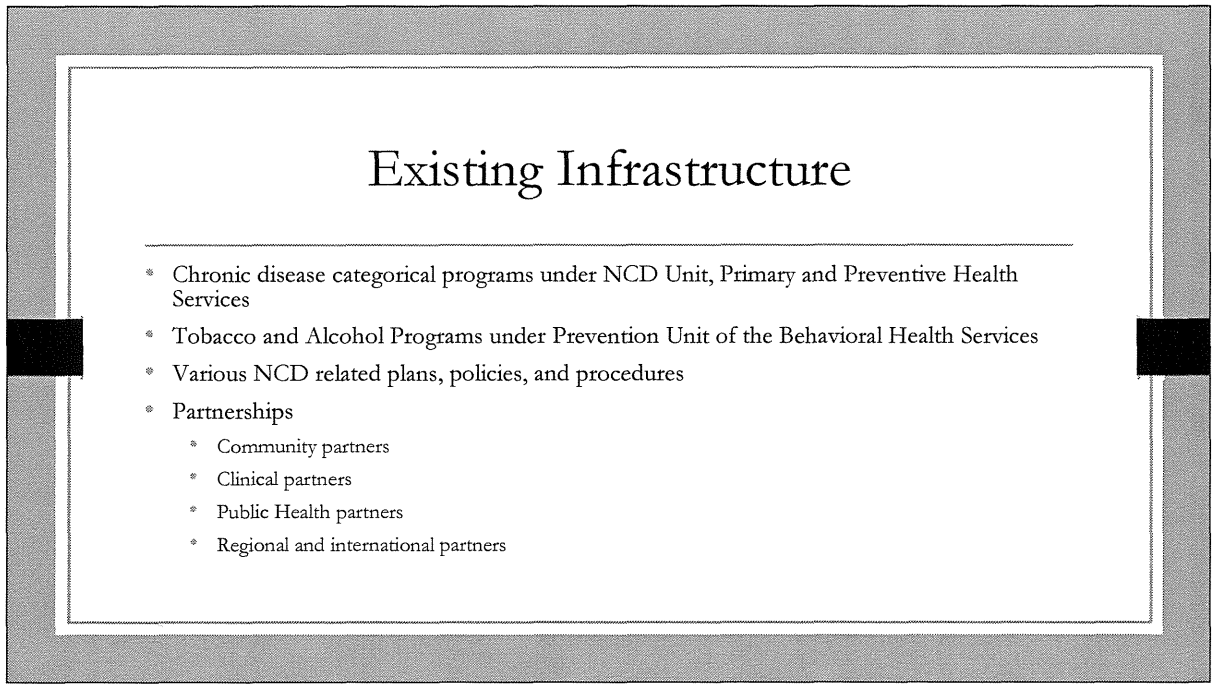
Before I begin with what Palau did a couple of years ago to activate a somewhat innovative response mechanism, let me briefly go over the Ministry's structure and a bit of existing infrastructure of our chronic disease/NCD programs.

3 Bureaus – public health, clinical and the newly formalized bureau of nursing

Nursing is comprised of both clnical and public health nurses

Clinical services has most of the physicians, mostly tertiary care, including hemodialysis center, physical therapy, ancillary services (lab, radiology, pharmacy), in patient department/wards

Bureau public helath – four divisions – primary and preventive, oral health, environmental health, and behavioral health



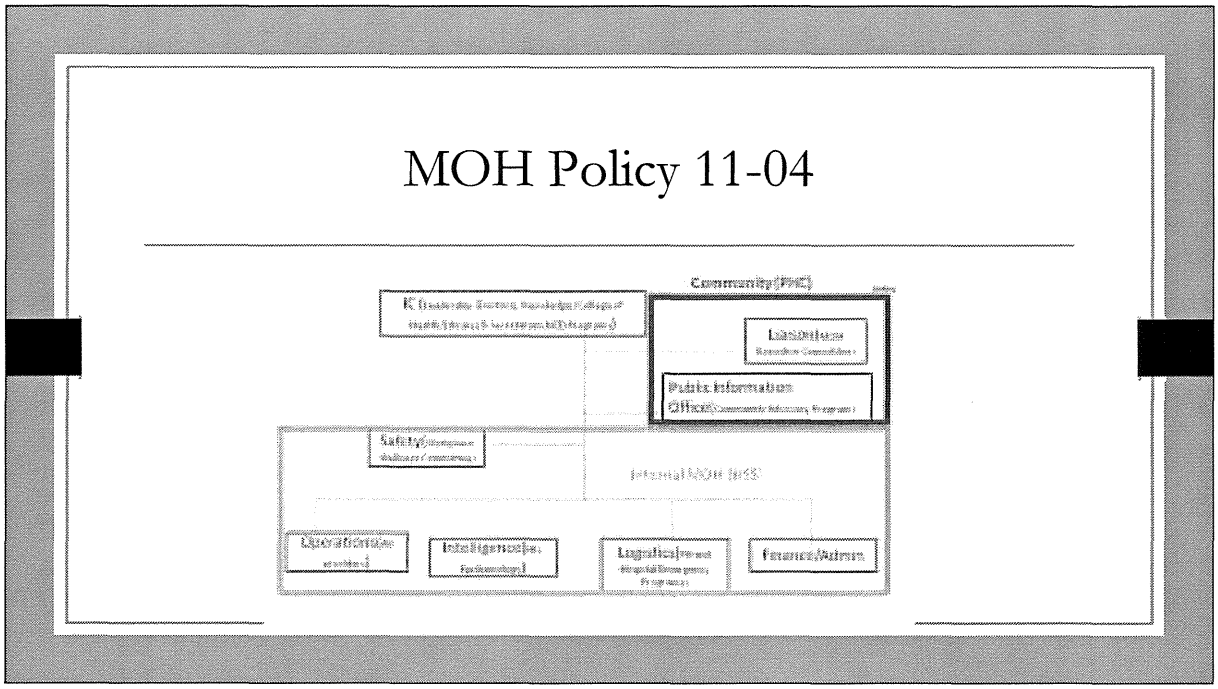
NCD Unit, falls under the Primary and Preventive Health Services, charged with overseeing certain grant driven programs, including cancer and diabetes and some small projects (1-2 years)

Tobacco and alcohol programs fall under the Behavioral Health Division

Therefore, we end up with vertical programs, various plans, policies and procedures related to NCD prevention and control but not necessarily well coordinated because of different grant and other administrative requirements that make it more difficult to have an integrated approach to responding to the crisis.

We have, however, partners who can mobilize those resources if we had a more concerted response. It is critical because these resources are limited and need to be utilized effectively to maximize results.

These include
•our community partners (NGOs and government entities like Ministry of Education)
•Clinical partners – physicians, nurses, laboratories, private clinics to be pulled in
•Public health partners – maternal, child and male health, community health centers, public health nurses
•Regional and international partners – funders, technical advisers



And so in 2011 April, under the direction of Dr. Stevenson Kuartei, then Minister of Health, a response mechanism called the incident command system, very much like the system used in some countries to respond to emergencies, was activated.

Basic structure:

Leadership (Incident commander) consisted of the medical doctors, College of Health—education and training mechanism/workforce development for the Ministry, a source of information needed for the response, and the NCD Unit as the secretariat.

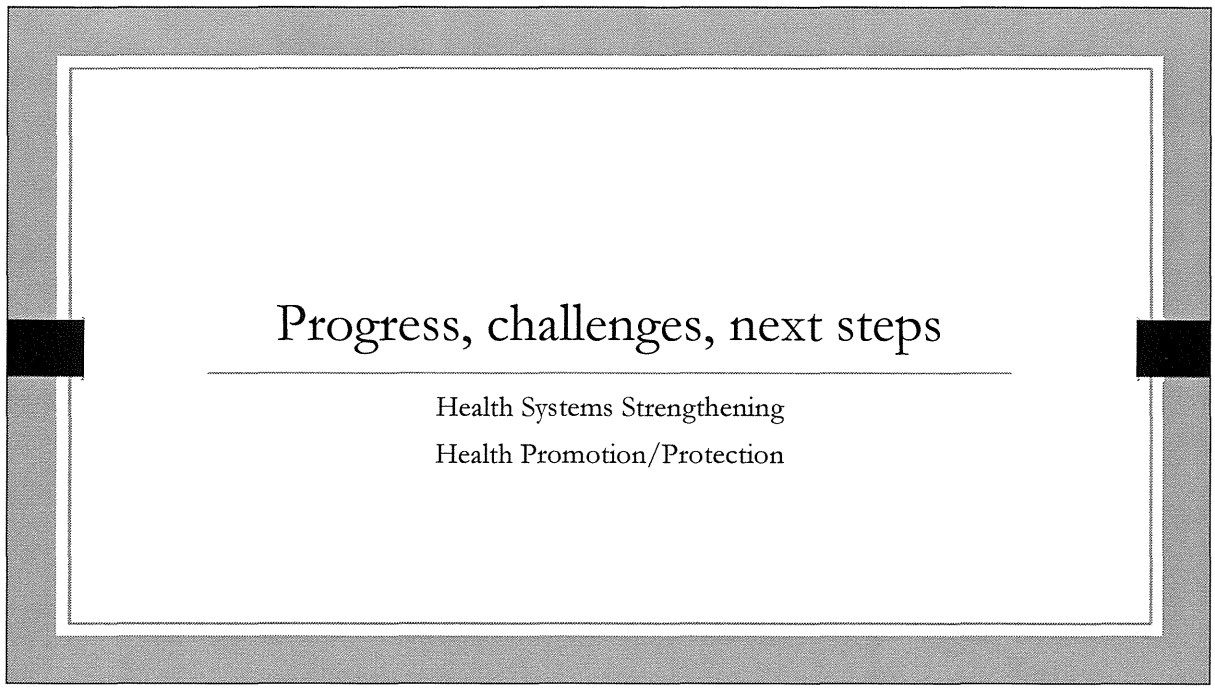
Liaison consisted of the MOH management, Minister of Health, directors and administrators both public health, nursing, and clinical services – role to engage the community with a "whole of government, whole of society approach".

Working alongside the liaison is the Public Information Officer –utilizing the existing MOH community advocacy program, charged with communication and health messaging with the community at large.

Then for health systems strengthening, we have the:

Safety Officer, comprised of the Workplace Wellness Committee, in charge of ensuring that MOH employees are not only healthy, but capable in responding to the crisis.

All health care providers (the clinicians) made up the operations section, responsible for identifying evidence based strategies to strengthen health systems. This expertise was responsible for "operationalizing" the prioritized objectives that the incident commander or the leadership set forth for strengthening the health system.



In the next servearl slides, will give:

Background information on the declaration and the structure used above.

As I mentioned before, there are two major components of the response: health systems strengthening and health promotion/protection.

I will, as I talk about what we have done (progress), mention a little bit of the challenges and finally the next steps, and what Palau needs to consider in moving forward with the response.

These have come about as a result of regional discussions based on the new global targets that WHO has set forth as requested by Ministers of Health and heads of state in the Pacific countries as well as the progress so far that Palau has made in the last couple of years.

There is now no question that NCDs are indeed and have been made or declared at a STATE OF HEALTH EMERGENCY at the national, regional and international level.

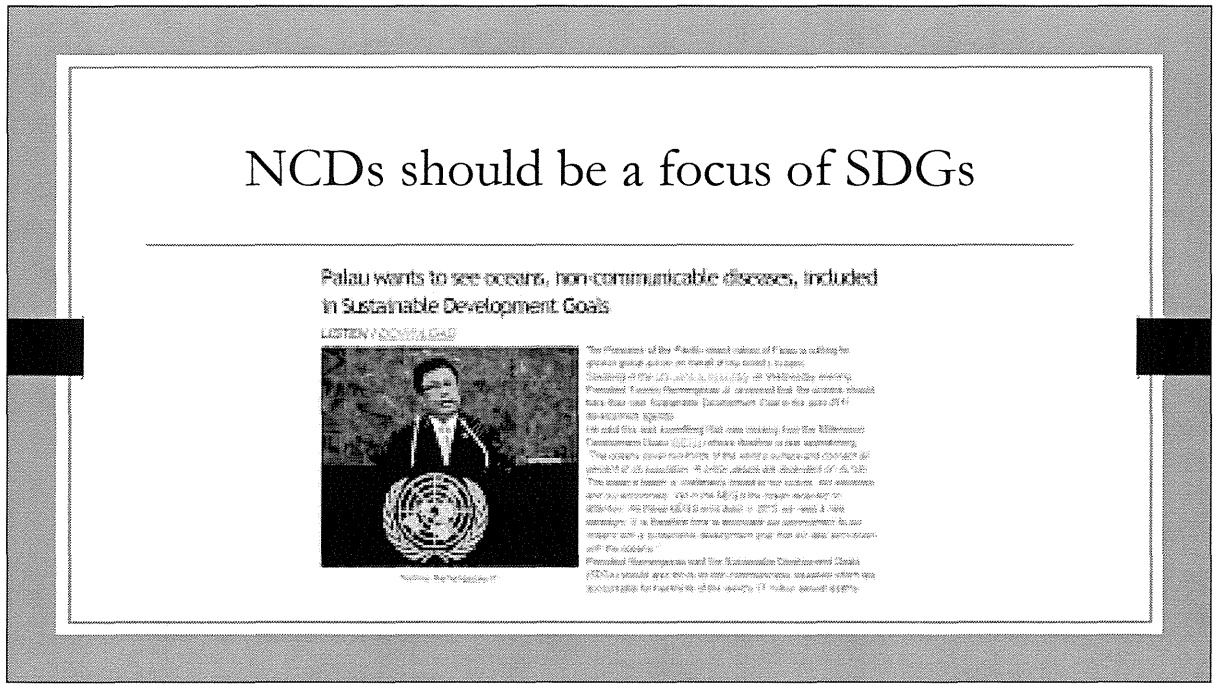
In 2010, the Pacific Islands Health Officers Association (an entity comprised of all the health ministers of the US affiliated Pacific islands –Palau, Guam, CNMI, RMI, FSM, and American Samoa) declared a "regional state of health emergency due to the NCD epidemic" in its Resolution 48-1.

In 2011, similar declarations including the Nadi Statement, Seoul Declaration, the Moscow Declaration, Honiara Communique by health ministers, making it to the 64th World Health Assembly and finally a political declaration made during the UN General Assembly in September 2011, the second time that the General Assembly met for a health issue, the first one AIDS.

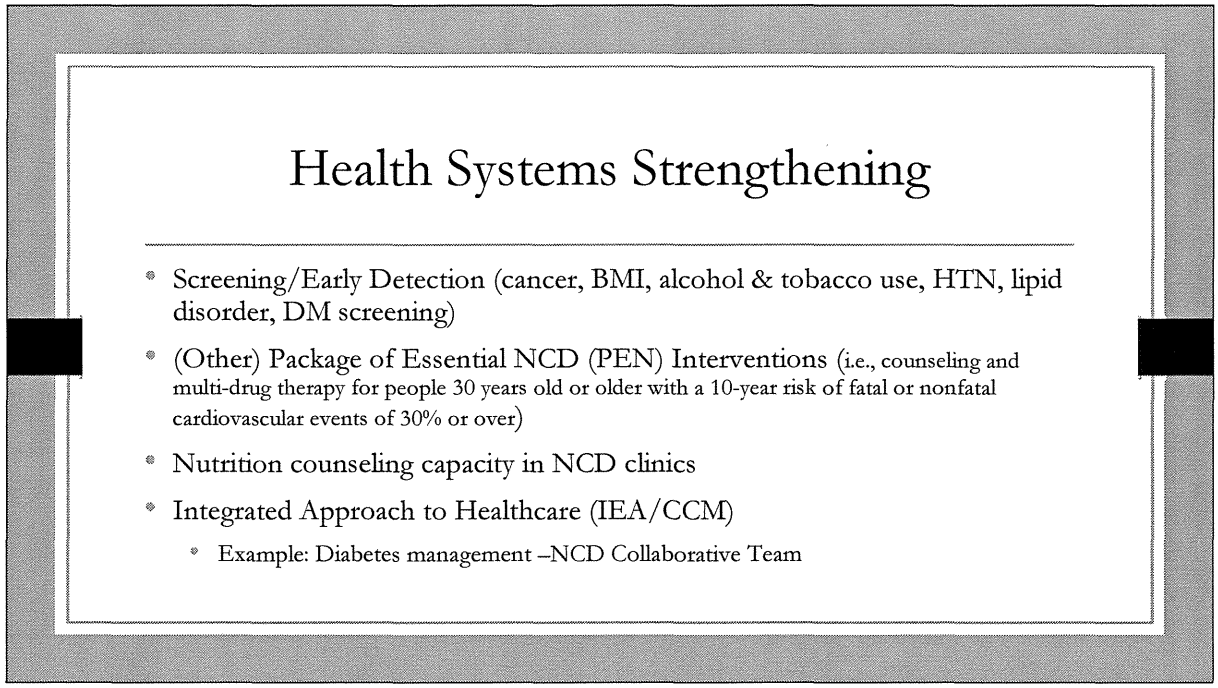
In line with this international journey, Palau fell in line and declared its state of health emergency through an inhouse Ministry policy which was immeidately followed by a presidential directive, Executive Order 295, which "declared a state of health emergency due to NCDs" mandating the MOH to respond and to have the authority to mobilize resources through the Executive Branch of the government.

Eight months after this declaration, the first national NCD Summit was held in Palau, which included multi-sectorial participation from various agencies within the government including Education, Agriculture, Justice, Transportation, Communications, and Community and Cultural Affairs.

The Summit called for action across all sectors and levels of government and community, for political commitment and a whole of government approach to the NCD crisis.

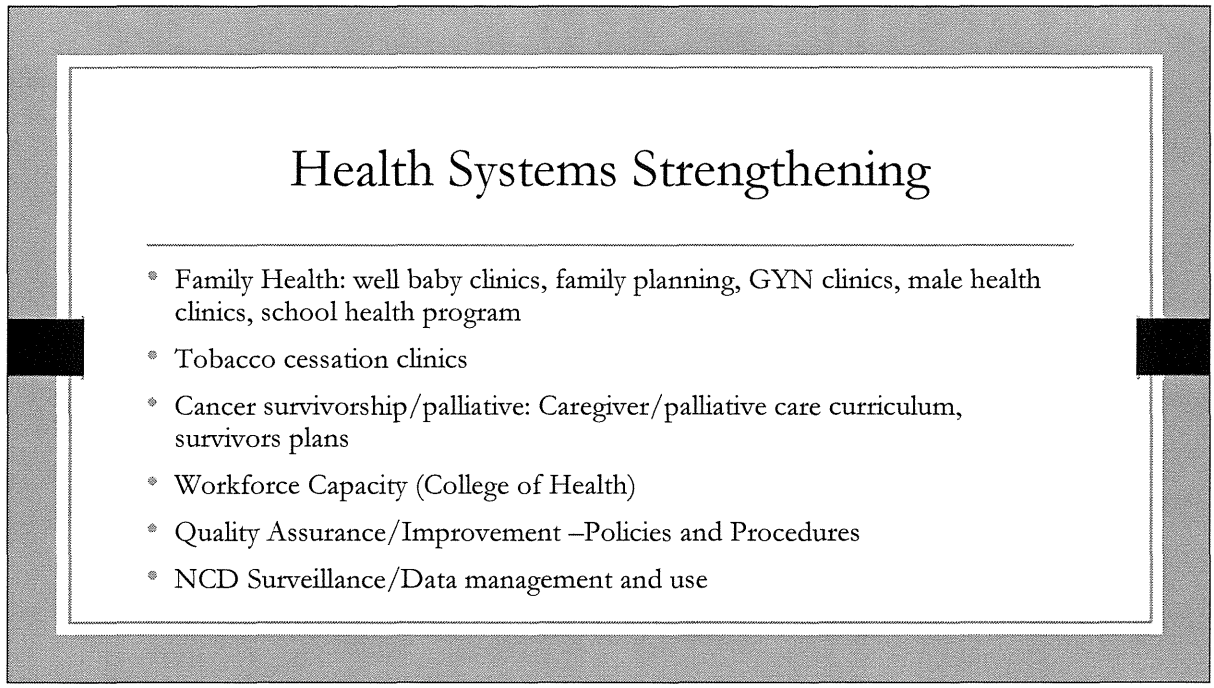


And although the Republic of Palau underwent major changes as a new administration took office earlier this year, we can see that the current administration continues the response with its own mark as our President made us all proud when he declared that "NCDs should be a focus of the sustainable development goals" during his address at the UN General Assembly in September this year.

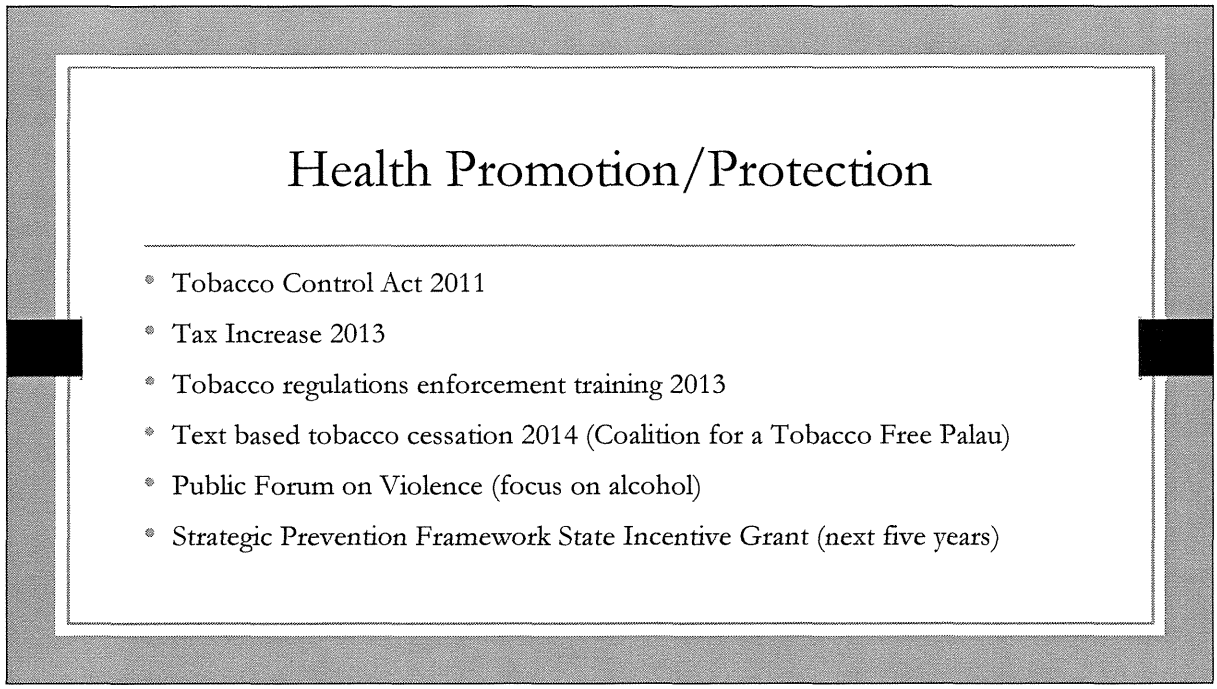


What has the Ministry of Health done in terms of Health Systems Strengthening?

•Ministry of Health continues to strengthen its screening services – fully funded cancer screening for breast and cervical, BMI, HTN screening mostly done in the community and NCD clinics, however, there needs to be stronger support systems for referrals. Lipid and DM screening done by patient request or doctor's orders due to limited resources.
•Palau in the process of implementing WHO Package of Essential NCD Interventions or PEN – consists of evidence based interventions in the primary care setting, particularly for primary prevention of heart attacks, strokes, and acute myocardial infarction and for outer islands in Palau (low resource settings), ensuring that they have the essential technologies and tools for implementing essential NCD interventions in primary care
•As I mentioned above, we need to ensure that there are support systems for referral after screening and this is especially true for nutrition or dietary counseling. Persons screened for BMI or other conditions that require nutrition counseling can't be referred and in the clinics, providers sometimes have to attend to the immediate needs of clients therefore leaving little time for necessary nutrition counseling. Fortunately, Palau has a nutritionist on board for 2 years who will assist in building nutrition counseling within public health and out in the community.
•Another priority set forth when the coordinated response started in 2011 was to formalize a more integrated approach to health care, referred to many in Palau MOH as the "integrated environmental approach" or the "chronic care model" in the US. A collaborative team was then formulated to encompass the different aspects of NCD care, which includes the NCD physician, foot care specialist, oral health, NCD program manager, nutritionist, NCD nurse, and others necessary to ensure a well rounded care approach to the NCD patient or client.



•The Ministry also continues to strengthen and maintain community and clinical linkages in family health, including family planning, GYN clinics, well baby clinics, and male health. It recently opened such clinics in a community health center in the middle of Koror, to ensure more accessibility and affordability. It also has a strong school health program which included screening and intervention for all schools in Palau.
•One of Palau's major challenges is the implementation of a good tobacco cessation program. Number 1, we've had problems training and retaining qualified individuals for the program, due to lack of good role models. It has also been a challenge maintaining nicotine replacement therapies for various reasons. Overall, we don't have a strong consistent cessation program to refer clients to.
•We've also have challenges in palliative care in the past. In Palau, there are really no hospices. Traditionally, children take care of their aging parents when they are at the end of their lives. However, the family structure has changed and we have both men and women working, children going to formal schools, and there is no one left at home to fulfill this role. A lot of Palauans go to the main hospital to die.
•Recently, the Ministry of Health in partnership with the local college has developed and implemented a care giver curriculum to try to assist families in caring for the elderly and the dying. In line with these efforts, we are trying to develop cancer survivorship plans. Our cancer registry data show that most cancer patients die in less than five years.
•The Ministry of Health also realizes that the health workforce has limited capacity. Because of this, it has developed a education and training mechanism called the "college of health" which includes an AS degree program at the community college, a high school health track, and in house short training sessions.
•We are also in the process of documenting all of MOH policies and procedures due the end of this month.
•Finally, Palau is in the process of developing a sustainable NCD surveillance system. We realize that a good response depends heavily on data driven decisions. We need to be



The second major component of the response is in health promotion and protection, focusing on policy and environmental changes.

In this regard, tobacco control has made the most strides, with a comprehensive tobacco control act passed in 2011, banning advertisement (including point of sale) and sponsorship, smoking in indoor public places, sale of single sticks, etc...

Recently in September, an excise tax law was passed, after many years since the last tobacco tax was passed.

These work have been facilitated mostly by the Behavioral Health Division's Tobacco and Alcohol Programs, with strong support from community partners.

Discussions among the north Pacific has revealed that enforcement of tobacco law has been challenging, Palau was able to conduct a tobacco regulations enforcement training this summer by WHO

And because of the many challenges that the Minsitry of Health has had with the implementation of a cessation program, the tobacco coalition will be piloting a text based cessation in January 2014, in line with those new years resolutions.

Earlier this year, in February, a task force was formulated as directed by Palau's elected officials and traditional leaders to address the increasing violence due to substance abuse including excessive alcohol consumption.