

63rd Pacific Island Health Officers Association “Partnerships to Embrace a Resilient Pacific”

Lee Auditorium, American Samoa

Charting the Course

for non-communicable disease prevention
and management using a collaborative model





The Face of Diabetes in the Pacific

- Western Pacific is home to the highest number of people (18-99 years) with diabetes in the world (almost 170 million, representing 37% of the total worldwide).
- Diabetes and cardiovascular disease are the leading causes of morbidity and mortality in the USAPI.
- Since 2008, the Pacific Chronic Disease Council (PCDC) has steadily worked to reduce the burden of diabetes and other chronic disease in the region.

International Diabetes Federation Diabetes Atlas, 8th Ed.

C H A R T I N G T H E C O U R S E

CDC, Division of Diabetes Translation Conference

May, 2008 - Orlando, FL



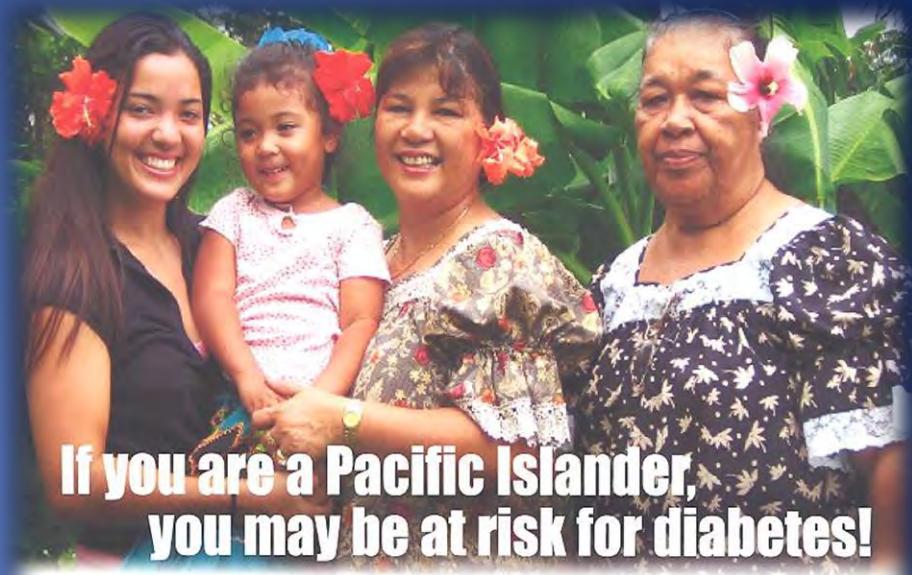


Vision:

Prosperous Pacific people, living a healthy lifestyle, in a healthy Pacific environment

Mission:

- Reduce the chronic disease burden
- Bridge the gap in disparities
- Share and mobilize resources
- Advocate with policy makers
- Recognize the uniqueness of the Pacific Islands



**If you are a Pacific Islander,
you may be at risk for diabetes!**

Type 2 diabetes (adult-onset diabetes) is a disease in which blood glucose (blood sugar) levels get too high in the body. Over time, this can affect almost every part of the body and cause serious health problems.

Some people, including Pacific Islanders, are more likely to get this disease than others. You should talk to your doctor if you marked " YES" for any of these questions below:

YES NO

- Are you Pacific Islander, Native Hawaiian, Asian American, Native American, Hispanic, or African American?
- Do you have family members with diabetes (such as parents, brothers, sisters)?
- Are you overweight?
- Do you exercise less than 3 times a week?
- Has a doctor ever told you that you have high blood pressure (140/90 or higher)?
- Has a doctor ever told you that you have high cholesterol?

The next 2 questions are for women who have been pregnant:

- Did you ever have diabetes when you were pregnant?
- Did you give birth to a baby that weighed more than 9 pounds?

The good news is that many people can stop themselves from getting diabetes if they take **small steps** toward living a healthy life!

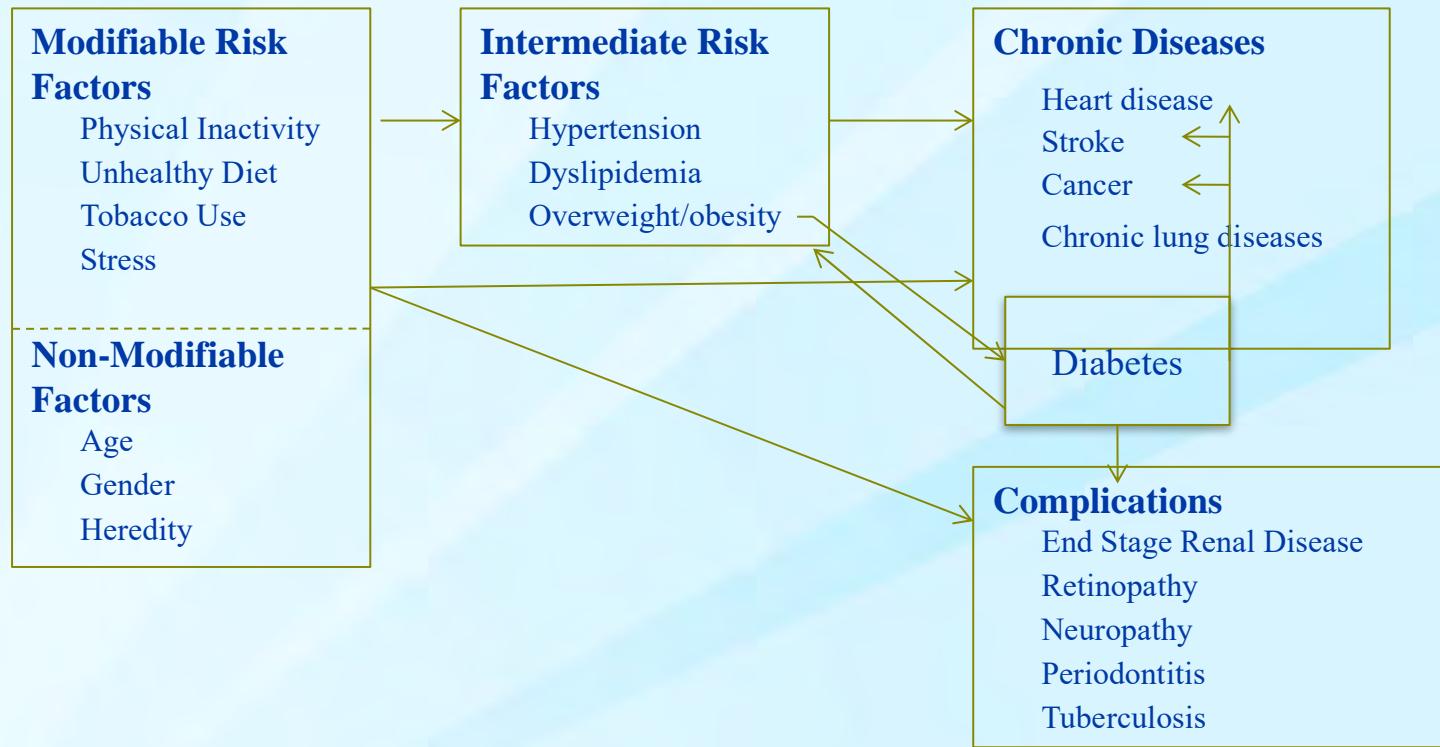


Pacific Diabetes Education Program • A Program of Papa Ola Lokahi • O'ahu: 808-597-6555



Pacific Chronic Disease Council
December 2017 - Strategic Planning Session

Risk Factors, Chronic Disease, & Diabetes



Social Determinants of Health—Socioeconomic, Cultural, Political, & Environmental
Impact of Globalization, Urbanization, & Population Aging

Essential Public Health Services in the Pacific



Everything in the Canoe Must Have Ten Uses: Pacific Island Diabetes Programs and the Essential Public Health Services

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Abstract

Objectives

After reviewing this poster the reader will be able to:

- Identify some challenges faced by the six Pacific Island Diabetes Prevention and Control Program—American Samoa (AS), Commonwealth of the Northern Mariana Islands (CNMI), Federated States of Micronesia (FSM), Guam, Palau, and Republic of the Marshall Islands (RMIs).
- Describe activities in the Pacific Island jurisdictions that support the Essential Public Health Services (EPHS).
- Identify success stories in diabetes prevention and control in the Pacific.

Methods

Representatives from the six Pacific Island Diabetes Prevention and Control Programs met in September 2007 with partner organization Papa Ola Lokahi and the CDC Division of Diabetes Translation to discuss culturally appropriate community-based interventions that illustrate their resourceful and integrated approaches to non-communicable diseases prevention and control, using the context of the EPHS.

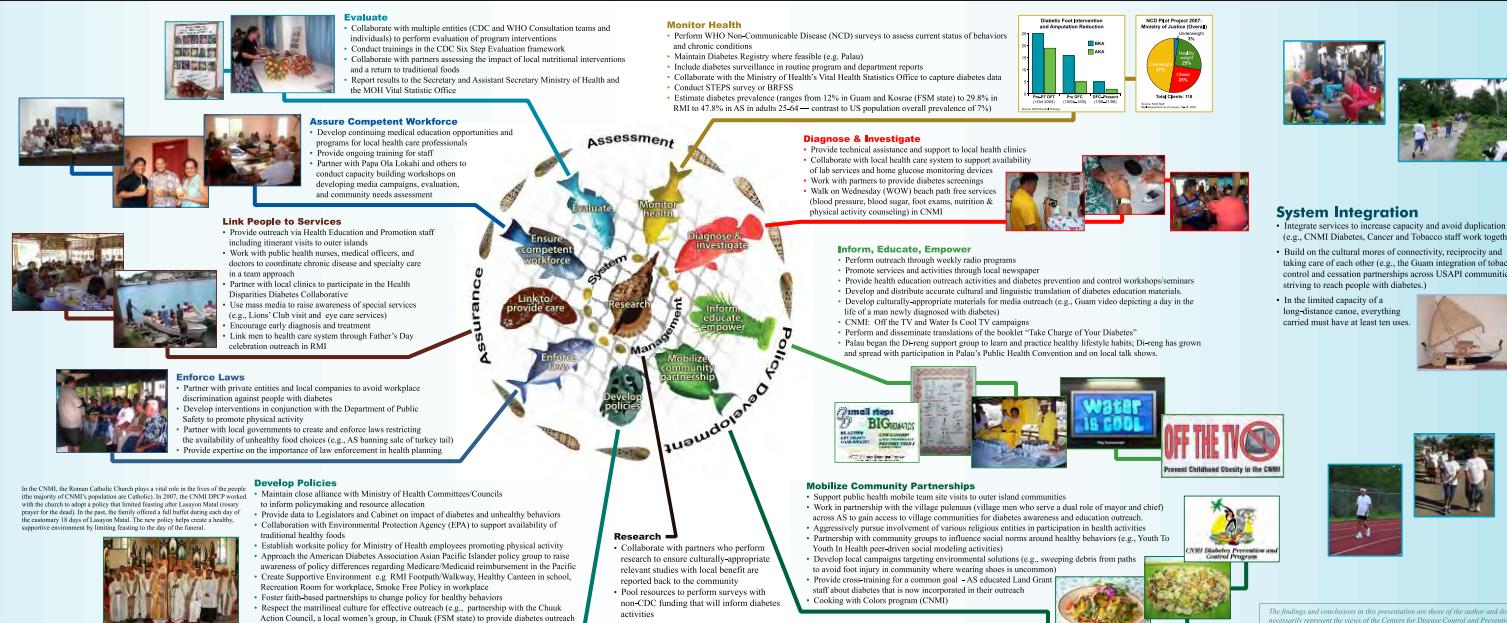
Results

The Pacific Island DPCPs identified health promotion strategies, partnerships and interventions that relate to each EPHS. Stories of actions taken to promote health and address health disparities in these diverse and challenging settings include the following factors:

- Grounding in cultural ways of respect and protocol
- Involvement in traditional ways of health (nutrition, physical activity and power of tradition)
- Involvement of faith-based community partners
- Collaboration with traditional leaders in Pacific Island Communities
- Focus on youth, families, men's/women's groups
- Tailoring campaigns for local media
- Integration of activities – getting the most from limited funds

Discussion

The Pacific Island DPCPs have faced extraordinary challenges of remote locations, climate in rapid change, and rapid increase in diabetes burden with innovation, creative integration and respect for traditional values to maximize efforts in diabetes prevention and control. Often activities combine several EPHS for maximal resource use. Traditional knowledge offers an analogy to this approach in the limited capacity of a long-distance canoe, everything carried must have at least ten uses.



The findings and conclusions in this presentation are those of the author and do not necessarily represent the views of the Centers for Disease Control and Prevention.

Screening for DM in Persons with Active TB

STANDARD 1 Every person with TB over the age of 18 should be screened for DM

Guideline 1.1 The diagnosis of DM may be made using one of the following criteria:

- A fasting plasma glucose ≥ 126 mg/dl
- A random plasma glucose ≥ 200 mg/dl
- A hemoglobin A₁C ≥ 6.5 %

Guideline 1.2 Abnormal glucose values should be verified with a repeat test in patients who have no symptoms of DM

Guideline 1.3 Rifampin can elevate blood glucose in TB patients. Glucose testing should be repeated after 2–4 weeks of TB treatment, or if symptoms of hyperglycemia develop while on TB treatment

Screening for TB in Persons with DM

STANDARD 2 Persons from the USAPI with DM who are at increased risk of TB should be screened for active TB disease and LTBI

Guideline 2.1 A TST or IGRA for TB should be done at the time of DM diagnosis

Guideline 2.2 Screening should be repeated as often as the local TB epidemiology may warrant

STANDARD 3 Patients identified with suspected or confirmed active TB should be referred to the local TB Program for TB management

STANDARD 4 Persons with DM who are identified with LTBI should be encouraged to take INH preventive therapy for 9 months

Guideline 4.1 Because persons with DM are at increased risk of peripheral neuropathy, they should receive vitamin B₆ to help prevent INH induced neuropathy (10–25 mg/day)

Guideline 4.2 Patients with LTBI should be educated for the potential side effects of INH therapy. Monthly monitoring for adherence and side effects is recommended

Abbreviations

AFB acid fast bacilli
ATS American Thoracic Society
DM diabetes mellitus
DOT directly observed treatment
EMB ethambutol

IGRA interferon gamma releasing assay
INH isoniazid
LTBI latent TB infection
PZA pyrazinamide

TB tuberculosis
TST tuberculin skin test
USAPI United States Associated Pacific Islands

DRAFT INTERIM: DECEMBER 1, 2010

USAPI Standards for the Management of Tuberculosis & Diabetes

Treating TB in Persons with DM

STANDARD 5 Ensure that TB treatment is appropriately adjusted in persons with DM

Guideline 5.1 Ensure that TB medications are properly dosed

- 5.1.1 Check creatinine for diabetic nephropathy, and if present, adjust the frequency of PZA and EMB according to ATS-CDC guidelines
- 5.1.2 Administer B₆ to prevent INH induced peripheral neuropathy (10–25 mg/day)

Guideline 5.2 Observe closely for TB treatment failure in persons with DM

- 5.2.1 Be aware of poor absorption of some TB meds in DM
- 5.2.2 Manage the many interactions between TB and DM meds
- 5.2.3 Be aware of a possible slight increase in TB drug resistance in persons with DM and active TB

Guideline 5.3 "Assure the Cure"

- 5.3.1 Consider extending treatment to 9 months for persons with DM, especially those patients with cavitary disease or delayed sputum clearance. Patients with DM have relative immune suppression and often a higher burden of TB disease
- 5.3.2 Upon completion of therapy, obtain sputum for AFB smear and culture
- 5.3.3 Evaluate patients at 6 months and one year after treatment for evidence of relapse



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Ratified 12-01-2010 by the membership of the Pacific Islands Tuberculosis Controllers Association and the Pacific Chronic Disease Coalition

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Pacific Capacity Building



C H A R T I N G T H E C O U R S E



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Guest Editors' Message

Joseph Keawe‘aimoku Kaholokula PhD and Nia Aitaoto MPH, MS

Assessing the System of Services for Chronic Diseases Prevention and Control in the US-affiliated Pacific Islands: Introduction and Methods

Henry M. Ichijo MD, MPH and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Territory of American Samoa: A Systems Perspective

Henry M. Ichijo MD, MPH; Faiesse T. Roby DCHMS, MBBS; Elisapeta S. Ponausua MPA; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Commonwealth of the Northern Mariana Islands: A Systems Perspective

Henry M. Ichijo MD, MPH; Becky Robles; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Federated States of Micronesia, State of Chuuk: A Systems Perspective

Henry M. Ichijo MD, MPH; Moria Shomour AS; Julio Marar; Kipier Lippwe MCN; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Federated States of Micronesia, State of Kosrae: A Systems Perspective

Henry M. Ichijo MD, MPH; Nena Toleno BA; Livinson Taulung DCHMS; Maria Mongkeya AS; Kipier Lippwe MCN; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Federated States of Micronesia, State of Pohnpei: A Systems Perspective

Henry M. Ichijo MD, MPH; Robina Anson AS; Elizabeth Keller DCHMS; Kipier Lippwe MCN; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Federated States of Micronesia, State of Yap: A Systems Perspective

Henry M. Ichijo MD, MPH; Julie Yurow BS; Kipier Lippwe MCN; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Territory of Guam: A Systems Perspective

Henry M. Ichijo MD, MPH; James W. Gillan MS, MPH; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Republic of the Marshall Islands, Kwajalein Atoll, Ebeye Island: A Systems Perspective

Henry M. Ichijo MD, MPH; Johannes Seramai AS; Richard Trinidad MD; Irene Paul BA; Justina Langidrik MPH; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the Republic of Palau: A Systems Perspective

Henry M. Ichijo MD, MPH; Ione deBrum CN Certificate; Shra Kedi; Justina Langidrik MPH; and Nia Aitaoto MPH, MS

An Assessment of Non-Communicable Diseases, Diabetes, and Related Risk Factors in the US-affiliated Pacific Islands: A Pacific Regional Perspective

Nia Aitaoto MPH, MS and Henry M. Ichijo MD, MPH



C H A R T I N G T H E C O U R S E



NIH-Supported NCD Assessment USAPI 2010

Without Collaborative:

- Fragmented services
- Lack continuity of care
- Limited evidence-based practice
- Lack of teamwork between clinicians and public health programs

With Collaborative:

- Collaboration between clinicians and public health NCD programs
- Clinical indicator data used to monitor quality of care
- Aggregated data available for administrative decisions

Aitaoto N, Ichijo HM. Assessing the Health Care System of Services for Non-Communicable Diseases in the US-affiliated Pacific Islands: A Pacific Regional Perspective. Hawaii J Med Public Health 2013;72(5 Suppl 1):106

C H A R T I N G T H E C O U R S E





NCD Collaborative Mission and Goals

Mission is to improve health outcomes for individuals living with diabetes and other NCDs. Goals include:

- Generate and document improved health outcomes.
- Transform clinical practice through models of care, improvement, and learning.
- Develop infrastructure, expertise, and multi-disciplinary leadership to support and sustain collaborative process.
- Build strategic partnerships.



C H A R T I N G T H E C O U R S E

Pacific Care Model

