

## **American Samoa NCD & Nutrition Strategy 2009-2013**

### **PLANNING FRAMEWORK**

Dr Temo K Waqanivalu, WHO SP

#### **1. Background**

In 2007, American Samoa had an estimated population of 68 200, 92% residing in urban areas. Based on 2007 population estimates, around 34% of the population is below 15 years of age, while 5% is above 65 years. Life expectancy at birth for men is estimated to be 72 years, while for women it is 80 years. The crude birth rate dropped from 30.0 per 1000 population in 2000 to 21.6 per 1000 population in 2007. The crude death rate in the same year was 4.0 per 1000 population.

The most serious health issues relate to the increase in chronic or noncommunicable diseases (NCD) associated with lifestyle, with their roots in improper nutrition and physical inactivity. Significant increases in the prevalence of obesity, in both sexes and at increasingly younger ages, are associated with a number of these conditions. Hypertension, cardiovascular diseases, cerebrovascular diseases, type II diabetes mellitus and its complications, arthritis, gout and some forms of cancer are among these important chronic diseases.

#### **2. Burden of NCDs in American Samoa**

Like many developing nations, American Samoa is facing the double burden of disease having not satisfactorily controlling communicable disease and already has to face rising rates of NCD or chronic diseases such as diabetes, heart disease including hypertension and stroke, cancers and respiratory disorders. In nutritional disorders there is probable coexistence of obesity and under-nutrition (micronutrient deficiency) within individuals, families and communities.

According to the Department of Health, the morbidity pattern has shifted significantly over the past three decades from infectious diseases to a predominance of NCD related to modernization and lifestyle changes. Based on hospital discharge data and notifiable disease records, the leading causes of morbidity in 2001 were dengue fever, chickenpox, dog bites, road traffic injuries and food poisonings. Heart diseases and malignant neoplasms remained the leading causes of mortality in 2005. Other common causes of death are diabetes mellitus, cerebrovascular diseases, chronic obstructive pulmonary and allied conditions, pneumonia and influenza, hypertension, accidents, perinatal conditions and septicaemia.

According to the National NCD STEPS survey in 2007, the prevalence of hypertension was 34.2% and Diabetes was 47.3% which is one of the highest in the Pacific and the world. Diabetic complications such as end-stage renal disease has warranted the set up of the renal dialysis unit and it is estimated that 80 - 90% of patients treated at the dialysis unit have diabetes. There are also growing numbers of cataracts and amputations due to diabetes.

There was a need to look at risk factors in the general population and put in place 'primary prevention strategies' to delay or halt progression of individuals at-risk to NCD. For this reason the WHO NCD STEPwise survey was carried out in 2007 and the results

reveal startling figures which has been the thrust of the whole NCD/Nutrition planning as government comprehend the full implications of the figures. The results are summarized in the tables below.



## American Samoa STEPS Survey

### Fact Sheet

The STEPS survey of chronic disease risk factors in American Samoa was carried out from June, 2004 to August, 2004. The STEPS survey in American Samoa was a population-based survey of adults aged 25-64. A stratified cluster sampling design sample design was used to produce representative data for that age range in American Samoa. A total of 2,072 adults participated in the American Samoa STEPS survey.

Results for adults aged 25-64 years (incl. 95% CI)	Both Sexes	Males	Females
<b>Step 1 Tobacco Use</b>			
Percentage who currently smoke tobacco daily	29.9% (26.6 - 33.1)	38.1% (33.5 - 42.7)	21.6% (18.2 - 24.9)
<i>For those who smoke tobacco daily</i>			
Average age started smoking (years)	20.6 (20.1 - 21.1)	20.1 (19.4 - 20.9)	21.3 (19.9 - 22.8)
Average years of smoking	19.0 (17.9 - 20.1)	19.9 (18.8 - 21.0)	17.4 (15.4 - 19.4)
Percentage smoking manufactured cigarettes	96.3% (94.9 - 97.7)	96.3% (94.8 - 97.9)	96.2% (94.7 - 97.7)
Mean number of manufactured cigarettes smoked per day (by smokers of manufactured cigarettes)	13.5 (12.3 - 14.8)	14.2 (12.6 - 15.8)	12.4 (11.1 - 13.7)
<b>Step 1 Alcohol Consumption</b>			
Percentage of abstainers (who did not drink alcohol in the last year)	36.5% (29.4 - 43.6)	27.3% (21.7 - 32.9)	58.8% (48.4 - 69.1)
Percentage of current drinkers (who drank alcohol in the past year)	63.5% (56.4 - 70.6)	72.7% (67.1 - 78.3)	41.3% (30.9 - 51.6)
<i>For those who drank alcohol in the last year</i>			
Percentage who drank alcohol on 4 or more days in the last week	3.0% (0.9 - 5.1)	3.4% (1.1 - 5.7)	1.3% (0.0 - 3.8)
Percentage of women who had 4 or more drinks on any day in the last week			33.9% (22.4 - 45.4)
Percentage of men who had 5 or more drinks on any day in the last week		49.6% (43.1 - 56.0)	
<b>Step 1 Fruit and Vegetable Consumption</b>			
Mean number of days fruit is consumed	2.4 (2.3 - 2.5)	2.1 (2.0 - 2.3)	2.6 (2.5 - 2.8)
Mean number of servings of fruit consumed per day	1.6 (1.5 - 1.7)	1.5 (1.4 - 1.6)	1.7 (1.6 - 1.8)
Mean number of days vegetables consumed	4.2 (3.9 - 4.6)	3.7 (3.4 - 4.0)	4.2 (3.9 - 4.6)
Mean number of servings of vegetables consumed per day	2.4 (2.2 - 2.5)	2.4 (2.1 - 2.6)	2.4 (2.2 - 2.6)
Percentage who ate less than 5 of combined servings of fruit & vegetables per day	86.7% (84.1 - 89.2)	87.9% (85.8 - 90.0)	85.6% (80.1 - 91.1)
<b>Step 1 Physical Activity</b>			
Percentage with low levels of activity (defined as <600 MET-minutes/week)	62.2% (56.0 - 68.4)	68.6% (51.8 - 65.3)	66% (60.1 - 71.8)
Percentage with high levels of activity (defined as ≥ 3000 MET-minutes/week)	2.4% (1.6 - 3.3)	4.2% (2.4 - 6.0)	0.6% (0.2 - 1.05)
Median time spent in physical activity per day (minutes)	12.9 (0.0 - 72.8)	15.0 (0.0 - 90.0)	8.6 (0.0 - 57.9)
Mean time spent in physical activity per day (minutes)	68.5 (50.0 - 87.1)	85.1 (62.5 - 107.6)	51.7 (36.5 - 66.8)



# American Samoa STEPS Survey

## Fact Sheet

Results for adults aged 25-64 years (incl. 95% CI)	Both Sexes	Males	Females
<b>Step 2 Physical Measurements</b>			
Mean body mass index - BMI (kg/m <sup>2</sup> )	<b>34.9</b> (34.7 - 35.1)	<b>33.7</b> (33.2 - 34.1)	<b>36.2</b> (35.9 - 36.5)
Percentage who are overweight or obese (BMI ≥ 25 kg/m <sup>2</sup> )	<b>93.5%</b> (92.1 - 94.3)	<b>92.7%</b> (91.6 - 93.9)	<b>94.4%</b> (92.8 - 95.9)
Percentage who are obese (BMI ≥ 30 kg/m <sup>2</sup> )	<b>74.6%</b> (73.1 - 76.1)	<b>69.3%</b> (67.2 - 71.3)	<b>80.2%</b> (77.0 - 83.5)
Average waist circumference (cm)	<b>104.8</b> (103.4 - 106.2)	<b>104.7</b> (103.7 - 105.6)	<b>104.8</b> (101.8 - 107.8)
Mean systolic blood pressure - SBP (mmHg), excluding those currently on medication for raised BP	<b>129.6</b> (128.1 - 131.1)	<b>134.1</b> (132.0 - 136.2)	<b>125.1</b> (124.0 - 126.1)
Mean diastolic blood pressure - DBP (mmHg), excluding those currently on medication for raised BP	<b>81.8</b> (80.5 - 83.1)	<b>83.5</b> (81.7 - 85.4)	<b>80.0</b> (79.1 - 80.8)
Percentage with raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)	<b>34.2%</b> (28.4 - 40.0)	<b>40.9%</b> (33.9 - 47.8)	<b>27.5%</b> (22.3 - 32.6)
Percentage with raised BP (SBP ≥ 160 and/or DBP ≥ 100 mmHg or currently on medication for raised BP)	<b>16.9%</b> (12.8 - 21.1)	<b>20.8%</b> (14.4 - 27.2)	<b>13.5%</b> (10.8 - 16.1)
<b>Step 3 Biochemical Measurement</b>			
Mean fasting blood glucose (mmol/L), excluding those currently on medication for raised blood glucose	<b>6.7</b> (6.5 - 6.9)	<b>6.8</b> (6.6 - 7.1)	<b>6.5</b> (6.3 - 6.8)
Mean fasting blood glucose (mg/dl), excluding those currently on medication for raised blood glucose	<b>120.3</b> (116.4 - 124.1)	<b>123.0</b> (118.0 - 128.1)	<b>117.5</b> (113.3 - 121.7)
Percentage with raised blood glucose as defined below or currently on medication for raised blood glucose <ul style="list-style-type: none"> <li>• plasma venous value ≥ 7.0 mmol/L or ≥ 126 mg/dl</li> <li>• capillary whole blood value ≥ 6.1 mmol/L or ≥ 110 mg/dl</li> </ul>	<b>47.3%</b> (44.0 - 50.7)	<b>52.3%</b> (48.6 - 56.0)	<b>42.4%</b> (38.2 - 46.5)
Mean total blood cholesterol (mmol/L)	<b>4.7</b> (4.7 - 4.8)	<b>4.7</b> (4.7 - 4.8)	<b>4.8</b> (4.7 - 4.8)
Mean total blood cholesterol (mg/dl)	<b>183.6</b> (181.7 - 185.4)	<b>183.3</b> (181.0 - 185.6)	<b>183.8</b> (181.8 - 185.8)
Percentage with raised total cholesterol (≥ 5.2 mmol/L or ≥ 200 mg/dl)	<b>23.4%</b> (18.7 - 28.0)	<b>23.1%</b> (18.4 - 27.7)	<b>23.7%</b> (18.8 - 28.5)
Percentage with raised total cholesterol (≥ 6.5 mmol/L or ≥ 250 mg/dl)	<b>2.7%</b> (0.9 - 4.4)	<b>3.2%</b> (0.6 - 5.7)	<b>2.2%</b> (1.0 - 3.4)
<b>Summary of combined risk factors</b>			
<ul style="list-style-type: none"> <li>• current daily smokers</li> <li>• less than 5 servings of fruits &amp; vegetables per day</li> <li>• Low level of activity (&lt;600 MET -minutes)</li> </ul>		<ul style="list-style-type: none"> <li>• overweight or obese (BMI ≥ 25 kg/m<sup>2</sup>)</li> <li>• raised BP (SBP ≥ 140 and/or DBP ≥ 90 mmHg or currently on medication for raised BP)</li> </ul>	
Percentage with low risk (i.e. none of the risk factors included above)	<b>0.4%</b> (0.1 - 0.8)	<b>0.5%</b> (-0.4 - 1.4)	<b>0.4%</b> (-0.03 - 0.8)
Percentage with raised risk (at least three of the risk factors included above) aged 25 to 44 years old	<b>69.2%</b> (62.2 - 72.2)	<b>74.6%</b> (65.8 - 83.4)	<b>64.3%</b> (58.1 - 70.5)
Percentage with raised risk (at least three of the risk factors included above) aged 45 to 64 years old	<b>76.7%</b> (72.1 - 81.4)	<b>80.4%</b> (72.5 - 88.3)	<b>73.1%</b> (68.4 - 77.8)

### 3. NCD Prevention and Control Services

The Department of Health and the National Hospital co-exist as two separate systems. The Department of Health is responsible for public health issues, communicable and noncommunicable disease prevention and health services through dispensaries at district and community levels. The National Hospital in Pago Pago is under the management of the Hospital Board, designated by the Governor, and is subject to the federal rules and regulation of the United States of America (i.e. the Hospital does not have to report to the Department of Health). Nevertheless, coordination between the Department of Health and the National Hospital is generally well conducted at the technical level. Most public health programmes continue to be funded by federal grants.

The territorial health priorities are as follows:

1. Increase the capacity of the health system to meet the health challenges of the 21<sup>st</sup> century through:
  - improving health policy development mechanisms,
  - developing the health workforce,
  - improving management processes at all levels, and
  - strengthening long-range health planning and programme planning
2. Identify emerging and re-emerging diseases and implement effective interventions.
3. Implement effective interventions to decrease the burden of chronic diseases related to unhealthy lifestyles, especially cardiovascular disease, cancer and diabetes mellitus.
4. Actively implement the Healthy Islands concepts of health promotion, health protection and primary health care in priority settings, particularly through community health centers and school-linked programmes.
5. Increase the effectiveness of public investment in health through development of decision-oriented information systems, applied research, effective deployment of the health workforce, application of appropriate technology, and increased allocation of funding for health promotion, health protection and primary health care.

Within the Department of Health there is federal grant funding for tobacco control, diabetes, cancer and prevention (which includes nutrition and physical activity). These exist as vertical programmes driven by federal funding through CDC and consists of disease prevention, health promotion and protection activities. There is no overall National NCD Plan but there is a draft National Plan of Action on Nutrition (NPAN) 1997 – 2007 framed according to the 9 thematic areas of the International Conference on Nutrition (ICN) 1992. It is supposed to be multisectoral and one of the components is promoting appropriate diets and healthy lifestyle.

In addition there is a policy framework for 'Health for All in American Samoa for the year 2000, and beyond' titled '**Health 2000 +**' developed in 1999 which serves as the backdrop policy for development of Health Action Plans. The focus is on:

- Effective use of scarce health resources
- Collaboration between public and private sectors
- Self responsibility and involvement of individuals and communities
- Health promotion and disease prevention
- Improving health system capacity
- Focus on Health outcomes

#### 4. NCD Planning:

After the NCD STEPS were completed in 2007 and report published in 2008 the Department of Health had to take steps to address the high prevalence of NCD and its risk factors hence the need to develop a National Strategic Plan for NCD prevention and control. A taskforce has been formed to think through the rationale and process of development of a national strategy for NCD and nutrition after the realization from the STEPS survey result that there is a real need to provide a national leadership on NCD and its prevention and control.

1. **Principles of Planning:** Based on evidence and current practice in the Pacific, a few principles are laid down in formulating the National Strategic Plan that it needs to be
  - **Comprehensive:** incorporating both policies and action on major NCDs and their risk factors together
  - **Multi-sectoral:** should involve widest of consultation incorporating all sectors of society to ensure legitimacy and sustainability
  - **Multidisciplinary and participatory:** consistent with principles contained in the Ottawa Charter for Health Promotion and standard guidelines for clinical management
  - **Evidence Based:** targeted strategies and actions based on STEPS and other evidence. The employment of both population wide and individual based interventions according to best practice is recommended.
  - **Prioritized:** consideration of strata of socioeconomic status, ethnicity and gender
  - **Life Course Perspective:** beginning with maternal health and all through life in a 'womb to tomb' approach
  - **Simple:** there is recommendation that the document was to both set some strategic direction but also simple enough for any stakeholder to be able to quickly identify activities that it could help drive its implementation.

#### 2. Vision & Goals

In alignment with the vision of the development and health plan, NCD could have its own vision that captures the intention of where it would want the population of American Samoa to be in terms of healthy lifestyle promotion and NCD prevention and control. It also then needs to set itself realistic targets based on the NCD STEPS survey and other available evidence. An example is outlined below:

#### *'HEALTHY AMERICAN SAMOA'*

**AIM:** To reduce the current and future burden of NCD and nutrition related disorders in American Samoa.

**TARGETS:** The AMS sets itself targets that it would aim to achieve through the implementation of the plan and strategies within it. That by 2013:

- Reduce prevalence of risk factors (tobacco smoking, physical inactivity, consumption of fruits & vegetables and alcohol use) by 5%
- Reduce prevalence of Diabetes by 10%
- Reduce hospital admission rates attributable to NCD by 10%
- Reduce rate of amputation by 50%
- Reduce cardiovascular mortality by 10%

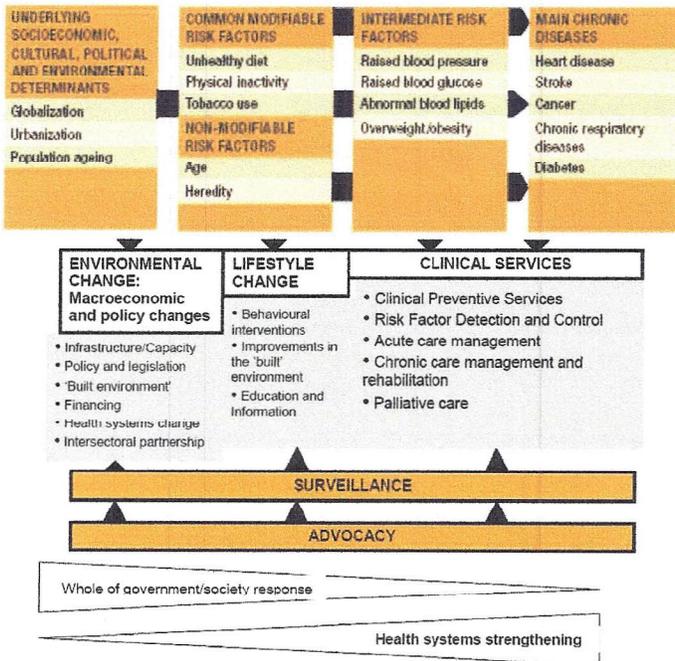
These targets are based on current WHO global goal of 'reducing NCD death rates by 2% pcr year until 2015' and some of the experiences from the pacific but needs to be contextualized with existing local experiences and estimates of what is achievable during the period of the plan. The period of the plan should be matched with the political tenure which is usually a four year term.

### 3. Framework:

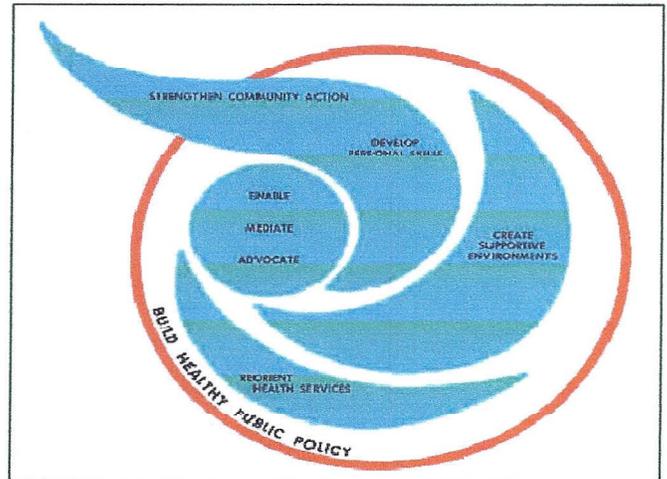
Consultations were conducted with the Department of Health including the Health Centers, I.B.J Hospital, Ministry of Agriculture and Ministry of Education. There are a few existing framework for possible use and the 5 Action areas in the WHO Ottawa Charter for Health Promotion and the joint WHO-SPC Pacific Framework for Prevention and Control of NCD are useful to model a suitable framework for American Samoa as shown below.

Figure 2. Framework for Action: NCD Prevention and Control in the Pacific

#### Causes of chronic diseases



#### WHO OTTAWA CHART OF HEALTH PROMOTION



It has been agreed or recommended from the consultation that for risk factors, the focus should be on the big four: **Tobacco Use, Alcohol misuse, Physical inactivity and Unhealthy Diet**. The dietary component could be expanded to include both over nutrition and under nutrition which could be coexisting in American Samoa community. The dietary component would then be incorporating the nine elements in the NPAN 1997 – 2007 so there is a one plan for nutrition and NCD.

On the clinical front there was consensus that Diabetes and Cardiovascular Diseases needs to be reflected. Notwithstanding the fact that it should be a multisectoral plan and that clinical management becomes too technical for other sectors, the fact that STEPS survey results ranks American Samoa to be one of the highest in Diabetes prevalence in the world is reason enough to include such.

With the realization that the current NCD services are quite fragmented, there is a need for coordination of the services currently in place for NCD and advocacy for awareness and commitment by government to address what has become the biggest health burden in American Samoa.

With these considerations, and by a combination of the Pacific Framework and the Ottawa charter, 5 major components have been recommended under which formulation of strategies for NCD and Nutrition in American Samoa are to be done as outlined below.

## **FIVE COMPONENTS**

The five components recommended for the plan are:

- I Advocacy and Coordination of NCD**
  - Government
  - Government and public sectors
  - LBJ and Dept of Health
- II Environmental Changes**
  - Development of Healthy Public Policy
  - Creating Supportive Environment (System Strengthening, Built Environment)
- III Healthy Lifestyle Programme (focusing on Healthy Eating, Physical Activity, Tobacco & Alcohol Control)**
  - Strengthening Community Action
    - School
    - Workplace
    - Church & Villages
- IV Diabetes & Heart Disease**
  - Primary and secondary services
    - Improve Personal Skills
  - Reorient Health Services
- V Monitoring, evaluation & surveillance**

For each of these components a matrix is suggested to assist in strategizing with appropriate stakeholders

Strategy	Activities	Indicator	Timeline	Leading Agency	Budget (US\$)

#### 4. Planning Process:

A Multisectoral NCD Taskforce has been formed to drive the planning process which would include a few phases:

- Phase I – advocacy and consultation with multiple stakeholders using the agreed framework
- Phase II – multi-stakeholder consultation workshop in Sept 09
- Phase III – Consultation, endorsement and launching of plan

Dr. Ivan Tuliau -	Medical Director - (DOH)
Manupo Turituri -	Director Agriculture
Claire Poumele -	Director of Education
Junior Satele -	Representative
Rose Tuiasosopo -	Dep. Director Budget
Anesi Alo -	Medical Director (LBJ Hospital)
Katarina Elisara -	Business
Tufele Liamatua -	Director Samoan Affairs
Mafutaga Uso -	Chairman Tobacco Youth Coalition
Corina Lee -	Fitness Instructor
Sapini Siatuu -	Retiree
Rosita Alailima Utu -	Nutritionist
Vaasa Amoa -	Health Educator
Salamo Tuiasina -	Acting Director DOH
Faleosina Voight -	women Council
Dottie Siavii -	Preventive Health Coordinator

## **Reference**

1. Department of Health American Samoa Government; HEALTH 2000 PLUS. MEETING THE HEALTH CHALLENGE OF THE 21<sup>ST</sup> CENTURY. Health for All in American Samoa Year 200 and Beyond; October 21, 1999
2. Department of Health American Samoa Government; HEALTH ACTION 2000 – 2005.
3. American Samoa NCD Risk Factors STEPS REPORT 2007
4. American Samoa National Plan of Action on Nutrition 1997 – 2007 (draft)
5. WHO & SPC Pacific Framework for the Prevention and Control of Noncommunicable Disease (NCD); August 2007
6. WHO OTTAWA CHARTER of Health Promotion
7. American Samoa Country health Information Profile 2007



**Noncommunicable Diseases (NCD)**  
**'Silent Epidemic Needing a Roaring Solution'**

**Am Samoa Health Policy Workshop**  
**22/07/2010**



World Health Organization  
Western Pacific Region

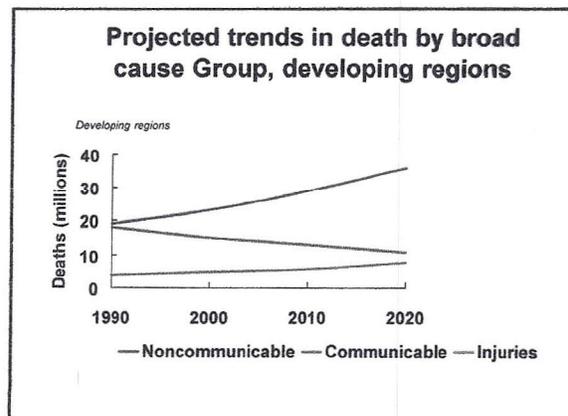
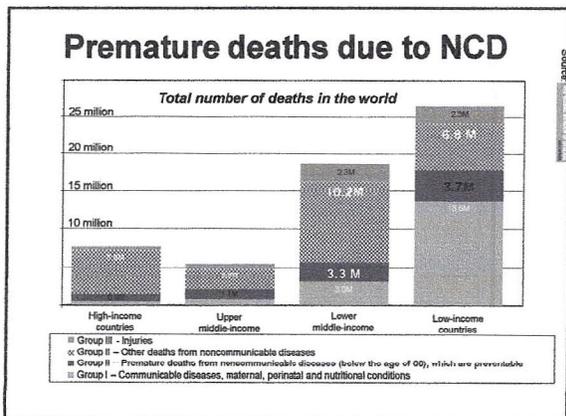
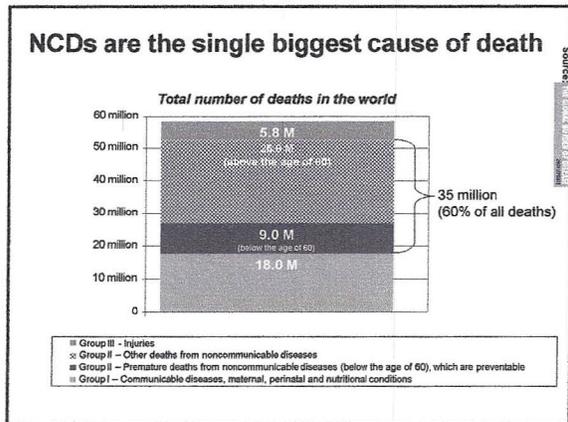
**Dr Temo K Waqanivalu**  
**WHO South Pacific**

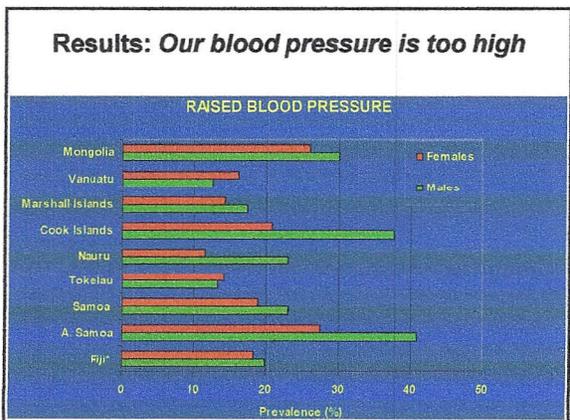
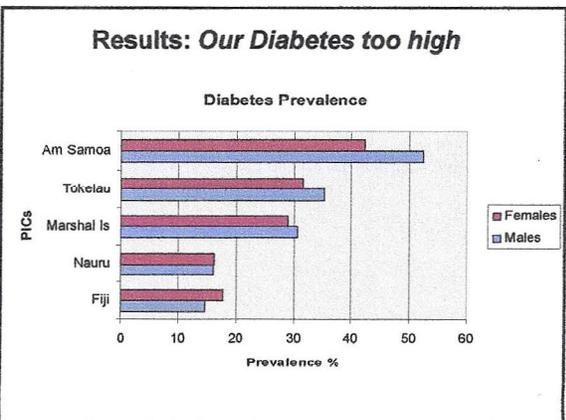
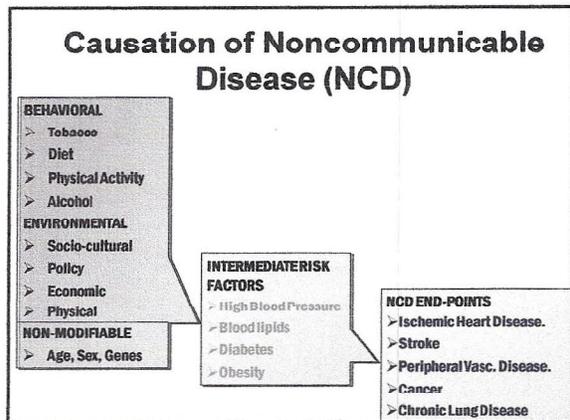
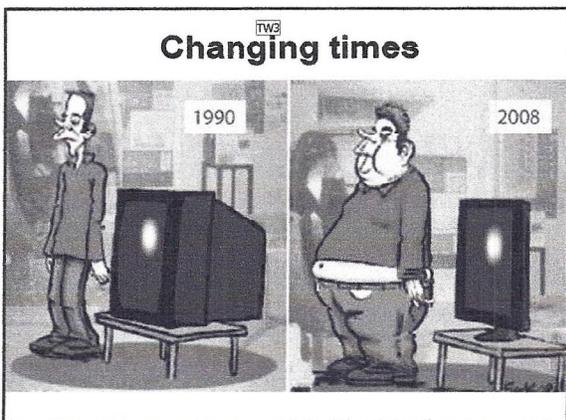
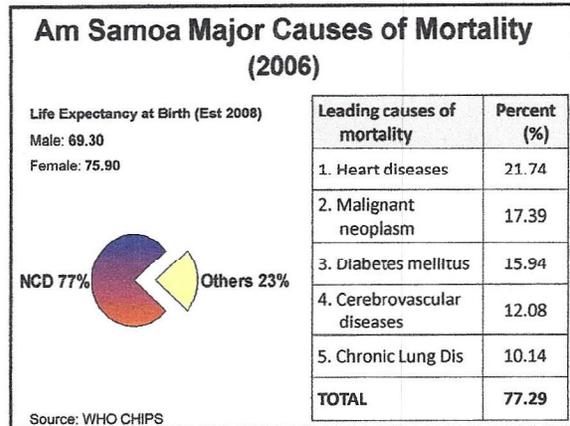
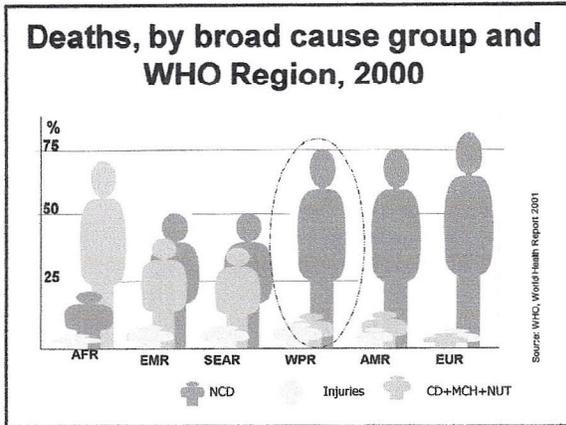
## Introduction

- The Burden
- The Solution
- The Efforts
- The Challenge



## THE BURDEN OF NCD

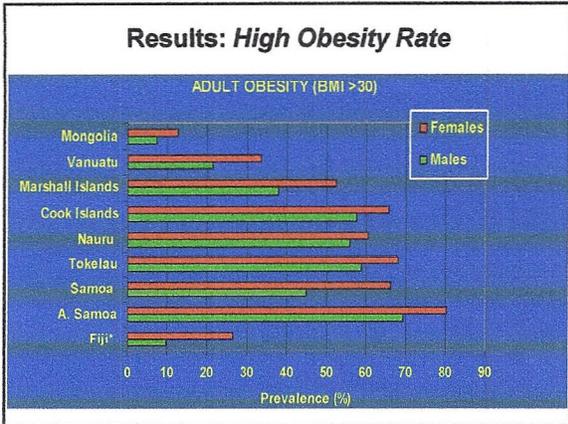




Slide 9

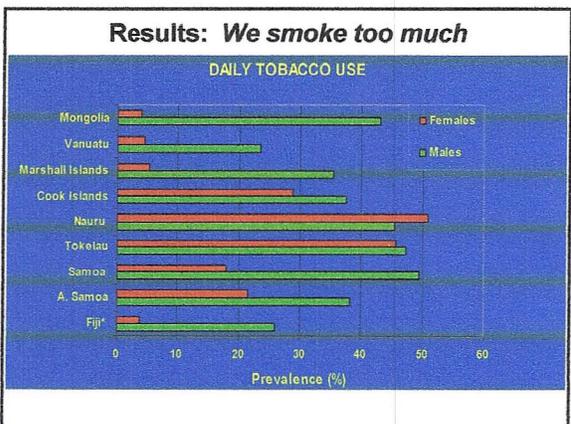
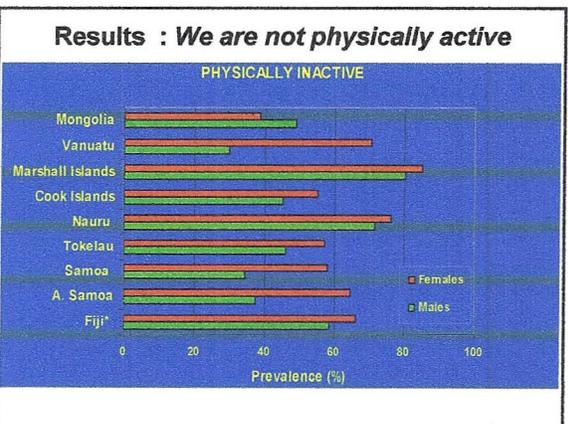
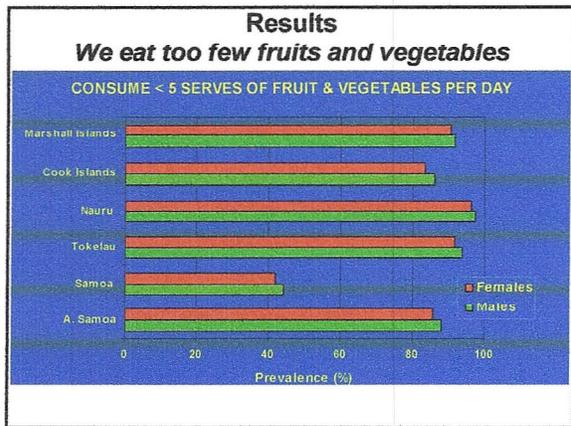
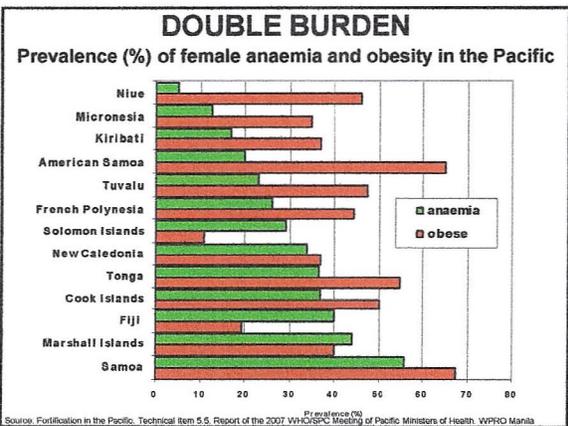
---

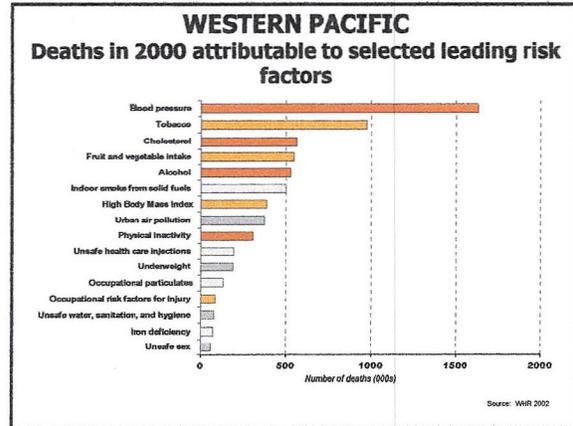
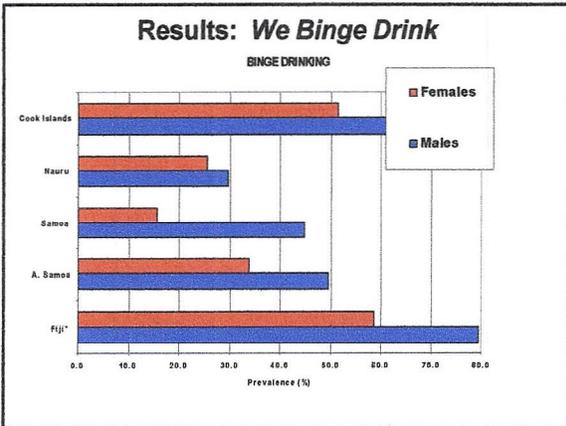
**TW3** I am not sure what you want to talk about on this slide  
WAQANIVALUT, 6/25/2009



### Recent Statements

- "Obesity is a time bomb for New Zealand and the Pacific," Prime Minister Helen Clark (at the opening of the WHO annual regional meeting in Auckland, Sept 2006).
- "The critical lesson from tobacco is waiting too long - 50 years from the first evidence. There would not be one minister of health who doesn't now appreciate the importance of tobacco control. Obesity is out of control and there is sufficient evidence to convince governments to take urgent action. Unless nations move now to rein in expanding waistlines we will have missed the boat. (WHO at ICO, Sydney Sept. 2006)
- We're possibly facing the first generation who would die before their parents....ICO





### Who is affected?

Poor, Rich, young and old

Ram Shekhar, President INDIAN Yoga Association (Registered)

### Who can afford?

#### Economic Burden: Costs of Treating NCDs in PICs

NCDs	Infectious and parasitic diseases		Other (including "maternal")		Total			
	US\$	%	US\$	%	US\$	%		
Fiji	13,612	38.8	6,479	18.5	15,012	42.8	35,103	100.0
Samoa	902	43.3	392	18.8	788	37.8	2,083	100.0
Tonga	1,951	57.8	413	12.3	1,007	29.9	3,372	100.0

(in US\$ and as % of Total Health Care Expenditure)

### Who can afford?

#### Economic Burden: Trt for preventable disease

**Rule of 75/80:**

- ~ 75% in Renal Dialysis Unit due to NCD
- ~ 75-80% of general surgery for NCD
- 75 - 80% adult admission to general wards

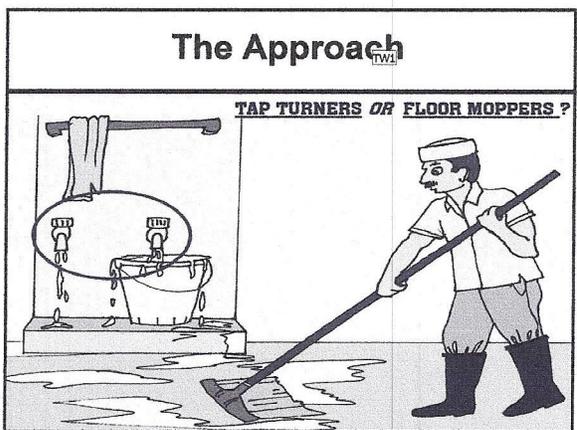
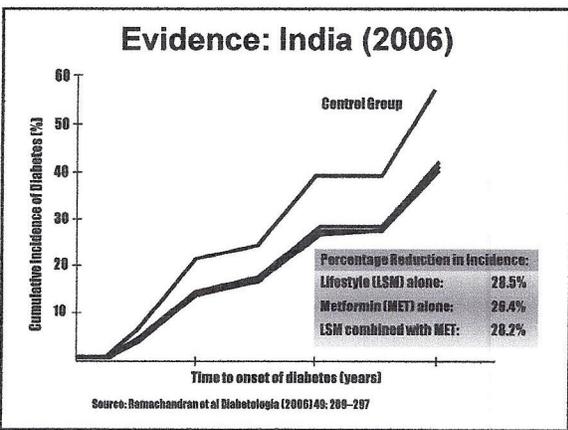
Chronic Disease is already the biggest problem for poor and middle-income countries. To concentrate so much on infectious is to add to the health burden of the next generation is what are the world's poorest, unhealthiest places

*The Economist August 2007*



**There are cost interventions to prevent NCDs...**

Disease/risk factor	Intervention	Cost of implementation	Health impact	Cost-effectiveness
Tobacco use	Excise tax on tobacco products	Low	Large	Very cost-effective
	Smoke-free workplaces	Low	Modest	Quite cost-effective
	Packaging, labeling and awareness countermeasures	Low	Modest	Very cost-effective
	Comprehensive ad bans	Low	Modest	Very cost-effective
Harmful use of alcohol	Excise tax on alcoholic beverages	Low	Modest	Very cost-effective
Unhealthy diet and physical inactivity	Reduce salt intake	Low	Large	Very cost-effective
	Food taxes (tar) and subsidies (fruit and vegetables)	Low	Modest	Very cost-effective
	Intensive counselling	Very high	Large	Quite cost-effective
Diabetes	Glycaemia control	High	Large	Quite cost-effective
	Hypertension drug treatment	Low	Large	Very cost-effective
Cardiovascular diseases				
	Cancer	Treatment of 1st stage breast cancer	Low	Modest
	Cervical cancer screening (PAP smear) and treatment	Low	Modest	Quite cost-effective
Respiratory disorders	Inhaled corticoid-steroids for asthma	Low	Small	Quite cost-effective



**Individual & Population Approaches**  
 - the combination is what works-

Truncate high risk end of exposure distribution (e.g. NCD obesity clinic). Clinical approach to disease prevention.

Reduce a little risk in most people (e.g. Dietary fat reduction through trade ban, Physical Activity Campaign). Lifestyle change combined with an environmental approach.

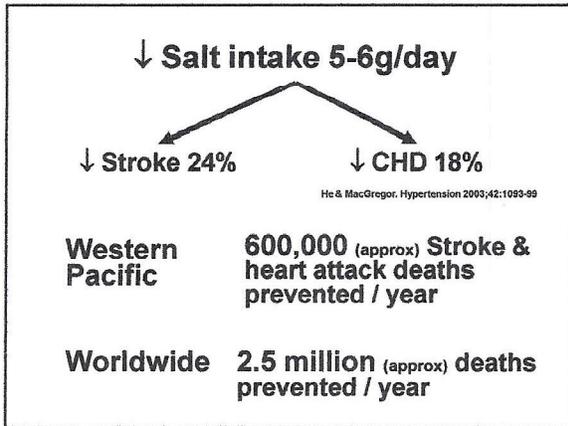
- Population approaches**
- Japan: reduction of salt intake resulting in lower blood pressure levels and greatly reduced stroke mortality
  - Mauritius: changing cooking oil from palm to soy bean oil resulted in a 15% decrease in serum cholesterol in the population
  - Poland: sudden change in dietary fats, related to political changes - resulted in 20% decline in heart disease mortality
  - Tonga: a reduction in tobacco tax by 30% resulted in increase consumption of tobacco by 100% from 2006-2008

Slide 28

---

**TW1** Nice picture but again not sure what you intend to talk about - that the 2-1-22 programme has focus on tap turners rather than moppers????

WAQANIVALUT, 6/25/2009



### Healthy Islands

It envisioned a time when the Pacific islands would be a place where:

- ❑ children are nurtured in body and mind
- ❑ environments invite learning and leisure
- ❑ people work and age with dignity
- ❑ ecological balance is a source of pride
- ❑ the ocean which sustains us is protected



**EARLY**



**EASY**

Healthy Lifestyle



**EXCITING & ENJOYABLE**



**EVERYWHERE**

### Its also about the Environment











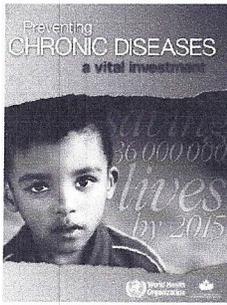
## THE EFFORTS

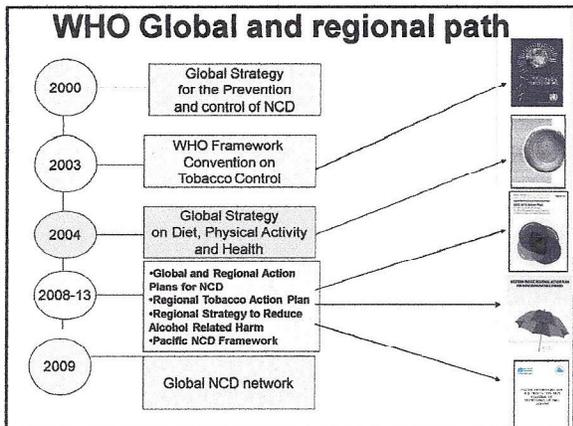
### Is the roar loud enough?

### Global Roar for NCD

**To reduce death rates from all chronic diseases by 2% per year over and above existing trends during the next ten years**

- prevention of 36 million chronic disease deaths by 2015, most of these being in low and middle income countries (10 million in Western Pacific)
- Ambitious & adventurous, but is neither extravagant nor unrealistic
- EVERY DEATH AVERTED IS A BONUS – half of them <70 yrs and 9/10 in low & middle income country

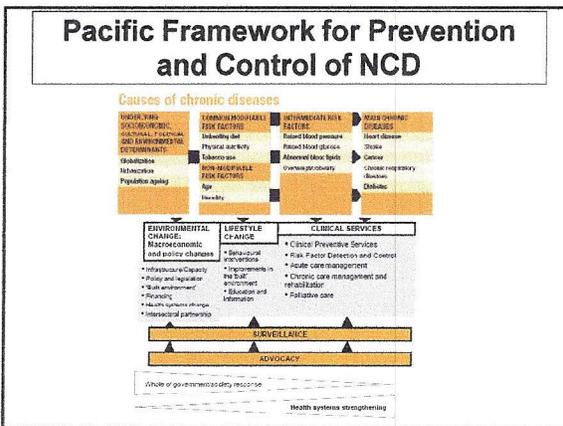




### Roar getting louder still UN General Assembly

- Prevention and control of NCDs, with a particular focus on developing countries.
- Builds on objective 1 of the NCD Global Strategy Action Plan 2008-2013
- The resolution calls on Member States and the international community to:
  - convene a high-level meeting of the General Assembly in September 2011, with the participation of Heads of State and Government, on the prevention and control of NCDs;
  - include at the high-level plenary meeting to review the MDGs in September 2010, discussions on the rising incidence and the socio-economic impact of NCDs in developing countries; and
  - request the UN Secretary-General to prepare a global status report on NCDs, with a particular focus on the developmental challenges faced by developing countries.

### Roaring at Regional Level



### 2-1-22 Pacific NCD Programme

- Joint programme of support for NCD Prevention and Control in 22 PICs by the 2 organisation of 1 team (SPC & WHO) supported by AusAID & NZAID

### Roar getting louder still PIHOA

- USAPI Health Leadership Declares Regional Emergency For the most, Most Costly Health Problem in the Region
- ..... the declaration directs the PIHOA Secretariat to partner with a wide variety of groups to develop a regional policy that will help partners and resources more effectively and make an array of recommendations to donors, health agencies, legislatures, regional associations, traditional leaders, community- and faith-based groups, and other sectors besides health, including agriculture, education, and trade

Pacific Islands Health Officers Association  
Board Resolution #48-01

*"Declaring a Regional State of Health Emergency Due to the Epidemic of Non-Communicable Diseases in the United States Affiliated Pacific Islands"*

## Roaring at National Level

- Am Samoa NCD STEPS Survey 2004
- NCD Assessment and Planning Framework
- NCD Draft Plan July 2010
- NCD Plan Final Draft by NCD Summit Oct 2010

**“HEALTHY AMERICAN SAMOA”**

**AIM:** To reduce the current and future burden of NCD and non-communicable diseases in American Samoa.

**TARGETS:** The AHS team itself suggests that it would aim to achieve through the implementation of the plan and strategies within 5-10 years (2015).

With these considerations, and by a combination of the Pacific Framework and O’neill’s report, 7 major components have been recommended under each of the strategies for NCD and Non-communicable Diseases in American Samoa are to be done as soon as feasible:

**FIVE COMPONENTS**

The five components recommended for the plan are:

- I Advocacy and Coordination of NCD**
  - Government and public sectors
  - Ministry of Health
- II Environmental Change**
  - Development of Healthy Public Policy
  - Creating Supportive Environment (Urban Design/Planning, Built Environment, Physical Activity, Tobacco & Alcohol Control)
- III Healthy Lifestyle Programmes (Focusing on Healthy Eating, Physical Activity, Tobacco & Alcohol Control)**
  - Strengthening Community Action
    - Schools
    - Workplace
    - Church & Village
- IV Diabetes & Heart Disease**
  - Primary and secondary services
  - Diabetes research (NCD Research Health Services)
- V Monitoring, evaluation & surveillance**

## Is it loud enough? Healthy Cities and Healthy Islands





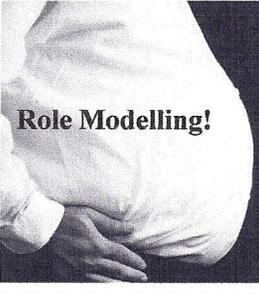

Do Demo



## THE CHALLENGE

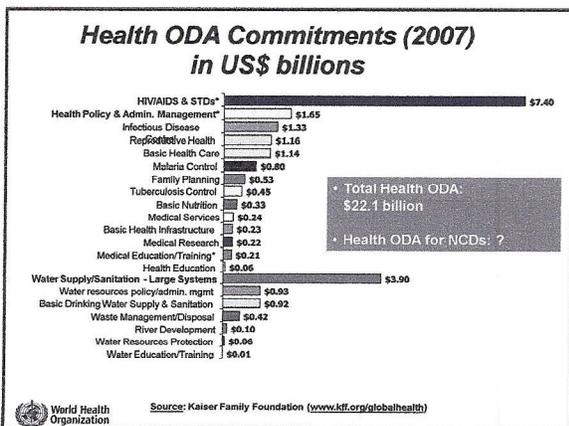
## Call on Leadership: By Govt

### CAUTION: HAZARDOUS WAIST



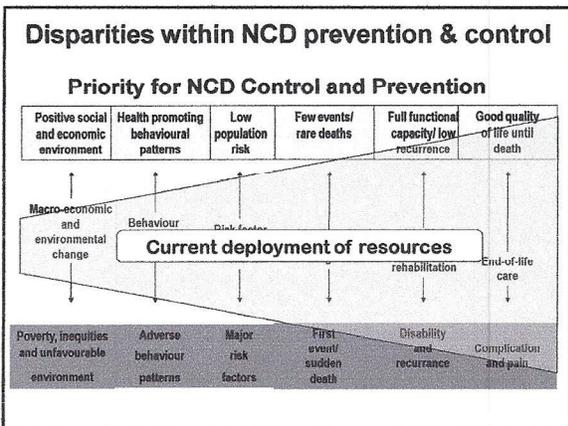
A hazardous substance is stored nearby. It's the excess fat packed around your middle. Fat that increases your risk of heart disease and other serious illnesses such as diabetes. Good reason to start a waist disposal program today.

Role Modelling!



## Leadership by Health -Cause for Optimism-



### PARTNERSHIP & ALLIANCES: "everyone's responsibility"

*Tipping Point*

- **Quote:**
  - "There are exceptional people out there who are capable of starting epidemics"
- **Application:**
  - The key persons in the Network are not defined by the hierarchy but by their ability to **connect** to others, and to **sustain** those connections.

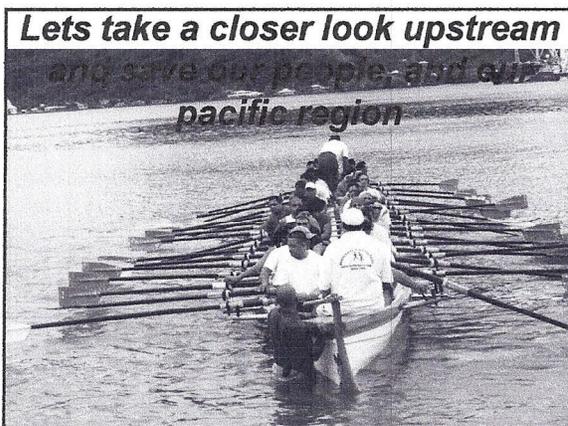
**The story of a physician trying to explain the dilemmas of the modern practice of medicine...**

*"You know", he said, " sometimes it feels like this. There I am standing by the shore of a swiftly flowing river and I hear the cry of a drowning man. So I jump into the river, put my arms around him, pull him to shore and apply artificial respiration and then just as he begins to breathe, another cry for help.*

*So back in the river again, reaching, pulling applying, breathing and then another yell. Again and again without end, goes the sequence.*

*You know, I am so busy jumping in, pulling them to shore, applying artificial respiration, that I have no time to see who the hell is upstream pushing them all in".*

Irving Zola 1970



STATUS QUO    INVEST NOW

**THE CAUSES ARE KNOWN.  
THE WAY FORWARD IS CLEAR.  
IT'S YOUR TURN TO TAKE ACTION.**