



23<sup>rd</sup> Pacific Islands  
Environmental  
Conference  
“Make a Difference”

24 June 2004

Saipan

# PIHOA

- An association of the six US Associated Pacific Islands Chief Executive Health Officers (Board of Directors)
- Associate and Affiliate Members (Directors of Health/Hospital, APNLC, PBMA, PBDA, PSAMHCC); Northern Pacific Environmental Health Association (newly formed, potential member)
- Federal Partners – DOI, HRSA, CDC

# PIHOA's Mission

- ▶ PIHOA is a non-profit organization led by chief executive health officers of the U.S.-affiliated Pacific Island countries and territories dedicated to improving the health and well-being of its communities by providing, through consensus, a unified credible voice on health issues of regional significance.
- ▶ [www.pihoa.com](http://www.pihoa.com) (Webpage – available soon)

# PIHOA's Role in EH

- *Advocacy since 1986*; does want to make a difference
- *1996-2000 Strategic Plan " Promote improved health practices, including medical care, public health, **environmental health**, mental health and common substance abuse prevention and treatment with the Pacific Region **through increasing the knowledge about the cause, prevention, treatment, and cure of diseases, conditions, or states detrimental to the health of the people within the Region.**"*

# Water, Sanitation, and Hygiene Determinants of Health

- ***"Water and sanitation is one of the primary drivers of public health. I often refer to it as "Health 101," which means that once we can secure access to clean water and to adequate sanitation facilities for all people, irrespective of the differences in their living conditions, a huge battle against all kinds of diseases will be won."*** –Dr. Lee Jong-Wook, Director General, WHO

# Diarrheal Illnesses (WHO Data)

- Major cause of morbidity & mortality worldwide
- ***1.8 million deaths/yr (including Cholera)***
- 90% children < 5 yrs, developing nations
- ***88% attributed to unsafe water supply, inadequate sanitation, & hygiene***

# Diarrheal Illnesses (WHO)

- Improved water supply – decrease morbidity by 21%
- Improved sanitation – decrease morbidity by 37.5%
- Simple Act of hand washing at critical times – decrease diarrhea cases by up to 35%
- Improvement in drinking water quality (point of use disinfectant) – decrease in diarrhea episodes by 45%

# Limited Regional Data

Causes of Deaths due to *Infectious and Parasitic Diseases* (ICD – 9):

Intestinal Infectious Diseases  
(ingestion of fecal contaminated food  
& water)-

Cholera, Salmonella, Shigella, E.coli, Amebiasis, Giardia, Cryptosporidiosis, etc)



# Deaths due to Infections & Parasitic disease, 2001

ICD-9 Code

Pacific Jurisdiction	Number of Deaths	Mortality (per 100,000)	Rank: Cause of Death
ROP	4	20	6 <sup>th</sup>
CNMI	6	7	5 <sup>th</sup>
Am. Samoa	4	6.8	4 <sup>th</sup>
Pohnpei	14	39	2 <sup>nd</sup>
Chuuk	3	6	5 <sup>th</sup>
RMI	NL	NL	NL
Kosrae	NL	NL	NL
Yap	NL	NL	NL
Guam	NL	NL	NL

**Note:** \* Chuuk: Symptoms, Signs, and Ill Defined Conditions: 43/100,000 (2<sup>nd</sup> leading cause of death.)

\* RMI: Sepsis/Septicemia : 96/100,000 (1<sup>st</sup> leading cause of death.)

Source: 2002 PIHOA Data Matrix

# *April 2000 Cholera Outbreak on Pohnpei*

- Killed at least 14
- Affected more than 2,800
- Cause: Contaminated water and/or improper food handling.

# POLLUTION

- According to the **South Pacific Regional Environment Programme (SPREP)**, pollution due to human activities is:
  - 1) **Major public health threat** in the Pacific Islands
  - 2) Major threat to **sustainable development**
- \* "Our environment is our economy." – President T. Remengesau

# Health and the Environment

- Unhealthy environment = unhealthy community/high public health disease burden.
- Good Environmental Policies and Practices = Healthier Community/Less Disease Burden
- Many challenges in Environmental Health in the region: safe water, pollution, solid waste disposal; CNMI - Supply of safe water – biggest challenge : ONLY 45-50% have 24/7 water; 16% inadequate plumbing

# Illegal dumping on southern Saipan - 2002



# Chuuk- Main Solid Waste Disposal Site



\*PIHOA SLIDE

# Outside Pit-latrine (open pit) CNMI

Mosquito & Fly Entry

Rodent Entry



# Chuuk- Nonfunctional Sewage Treatment Plant



\*PIHOA SLIDE



# PIHOA's Ongoing Efforts

- 1) **Networking/upgrading capacity in disease surveillance and response** (PPHSN: PacNet, Labnet, Epinet).
- 2) **Regional PIHOA/CDC epidemiologists** available in the region (FSM, Guam).
- 3) Working with CDC, establishing Protocols for **shipping DGs (infectious specimens)**.
- 4) **Establishing Guam as the Regional PH Laboratory** for Micronesia and upgrading its capacity. (AS uses HI public health lab) & hiring a Regional Lab Coordinator

# Environmental Health & PIHOA

## Summary

- PIHOA has endorsed and advocated for Environmental Health (EH) since 1986, but ***has not been proactive.***
- Presently, PIHOA becomes involved only when infectious diseases threatens our populations, either through disasters or food and water borne diseases (***surveillance and response***).
- In the past, ***PIHOA has relied on local EPA*** and/or Waterworks Authorities for monitoring, evaluation, and/or correction/improvement to water quality, sewage treatment, and solid waste disposal.

# Environmental Health & PIHOA

## The Future

- ***PIHOA acknowledges that EH*** (access to clean water and sanitation, proper sewage disposal) ***needs to be more aggressively addressed*** as these continue to threaten our Islands' health and well-being.
- ***PIHOA wants to make a difference*** and re-commits itself and joins EPA and its partners in the US Affiliated Pacific Island Jurisdictions in addressing the water, sanitation, and pollution problems in the region.
- Include newly formed Northern Pacific Environmental Health Association as Affiliate Member

# Our Shared Vision: Healthy Islands, Healthy People

- ✓ Our home are located on a limited land mass with fragile ecosystems; with a continuing proliferation and accumulation of plastics, paper, glass, metal, drums of hazardous chemicals, etc;
- ✓ The build up of which results in unhealthy areas that promote mosquitoes, rats, mice, and flies. The rubbish eventually breaks down and leaches into our drinking water.
- ✓ The rubbish that doesn't break down, takes up space (not biodegradable).

