

Pacific Islander Populations In the Midwest: Health & Culture - Marshallese -



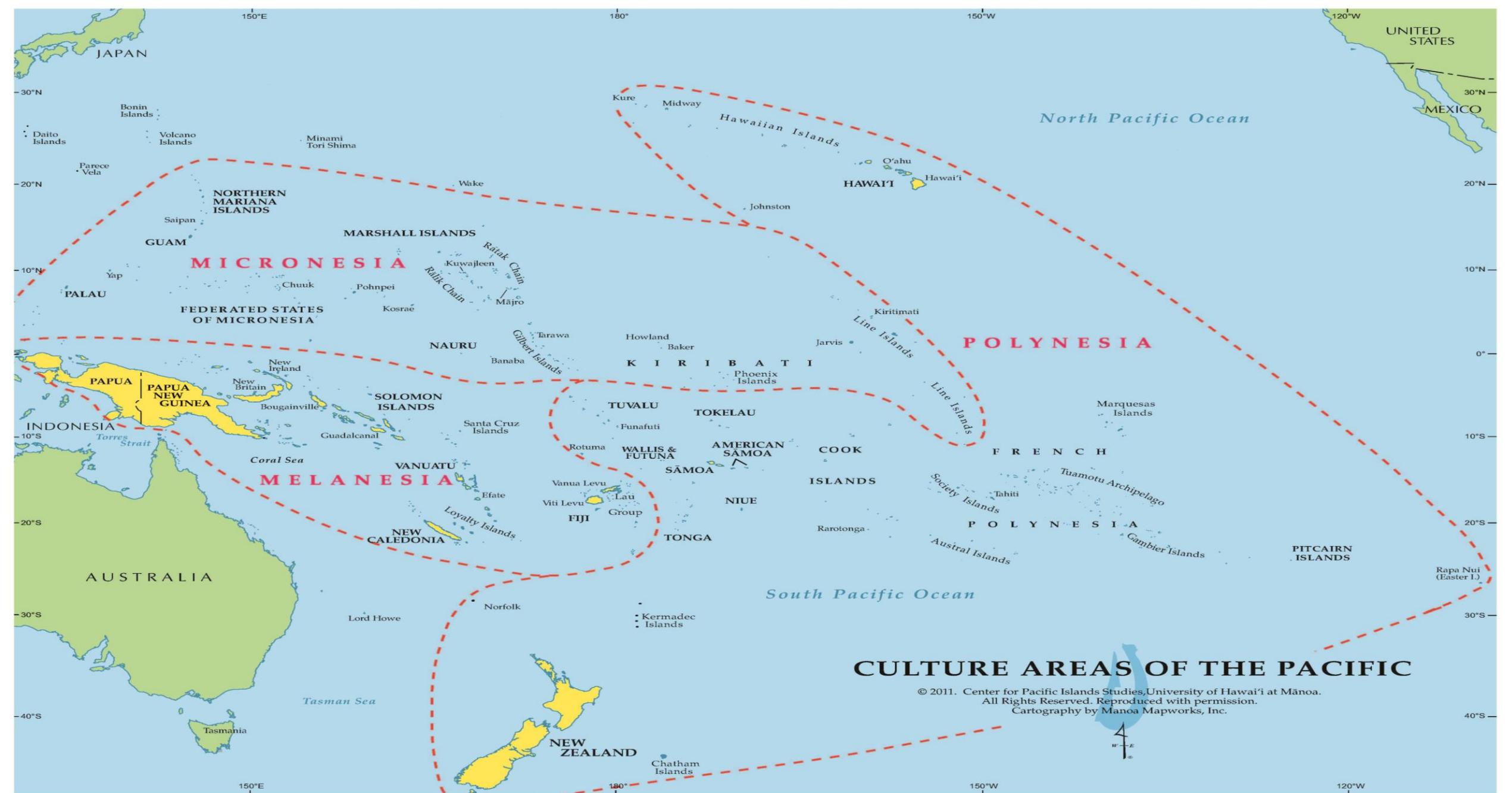
MEDICAL



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Outline

- Health Status
 - Marshall Islands vs Arkansas
- Medical Genetics/Birth Defects
- Newborn Screening/Genetics Services



(Courtesy of the Center for Pacific Islands Studies, UH Manoa)



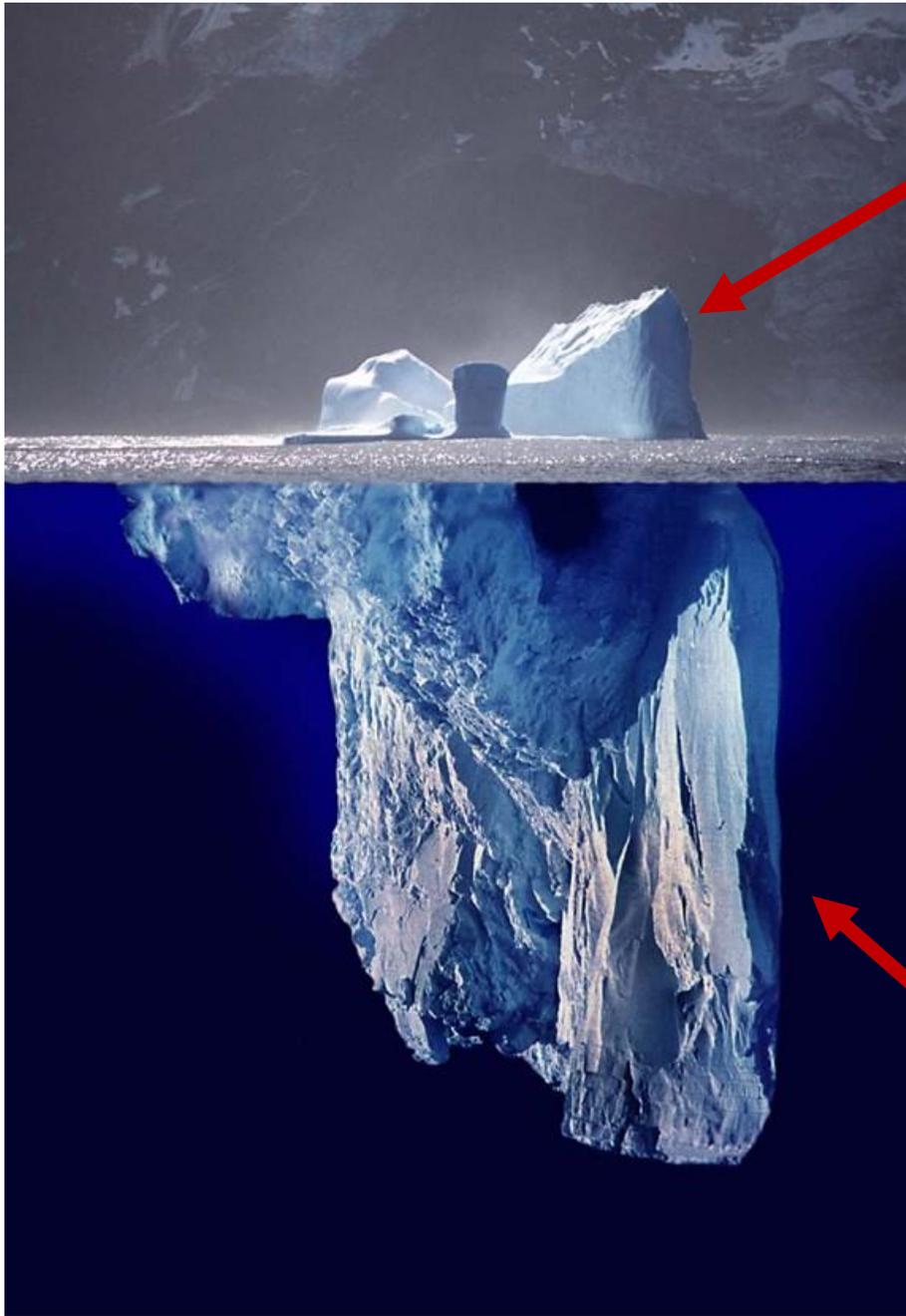
RAND McNALLY
United States

- State Capitals
- Major Cities
- Population Density
- Topography
- Water Bodies
- Political Boundaries
- International Boundaries

Rapid Population Growth in the South and Midwest

- Fastest population growth is in rural South and Midwest
- Growth is a combination of both primary migration from USAPI and secondary migration from the west coast

% Increase in Pacific Islander Population, 2000 – 2010 Census	
McDonald County, MO	760%
Cherokee County, KS	712%
Ottawa County, OK	564%
Washington County, AR	324%
Benton County, AR	309%
Jackson County, IA	287%
Dubuque County, IA	279%
Jasper County, MO	275%
Black Hawk County, IA	259%
Newton County, MO	238%



Pacific
Islander
population
counted in
Census

Pacific Islander population based
on birth, school, and employment
records

Health Status

Infant Mortality: (per 1000 live births)

Federated States of Micronesia	21
Marshall Islands (RMI)	21
Palau	11
US	6

World Health Organization, 2011

- In 2010, the leading cause of mortality for < 12 months was sepsis, malnutrition, pneumonia, drowning, and prematurity
- In 2010, the leading cause for mortality for > 1 year < 4 years was severe sepsis, bacterial meningitis, gastroenteritis, and pneumonia

Life Expectancy

National data unavailable due to aggregation issues, but state and territory data show disparities in life expectancy:

Pacific Islander	White, non-Hispanic	US total population
68.3 years	79 years	78.8 years



Diabetes

- Some of the highest rates anywhere in the world
- 24-51% of surveyed Pacific Islander populations have diabetes
- In comparison 8.8% of total U.S. population has diabetes
- 24% of Pacific Islanders surveyed by the CDC reported having diabetes in 2010. Does not take into account undiagnosed cases
- Less likely to receive adequate diabetes management education, less likely to have control over blood sugar



Diabetes in Arkansas



UAMS IPE screenings of Arkansas Marshallese:

- 398 adults screened in 9 screenings
- 38% have diabetes
- 32% have HbA1c results indicating elevated risk of diabetes
- Just under 30% have HbA1c results in the normal range
- 82 new cases of diabetes detected as a result of screening

Hypertension and Cardiovascular Disease

- Cardiovascular disease, which includes coronary heart disease and stroke accounts for 1 in 3 Pacific Islander deaths
- CDC's 2010 National Health Interview Survey found:
 - 20.2% of Native Hawaiian/other Pacific Islanders had any type of heart disease
 - 19.7% have coronary heart disease
 - 10.6% have experienced stroke
 - 40.8% have hypertension



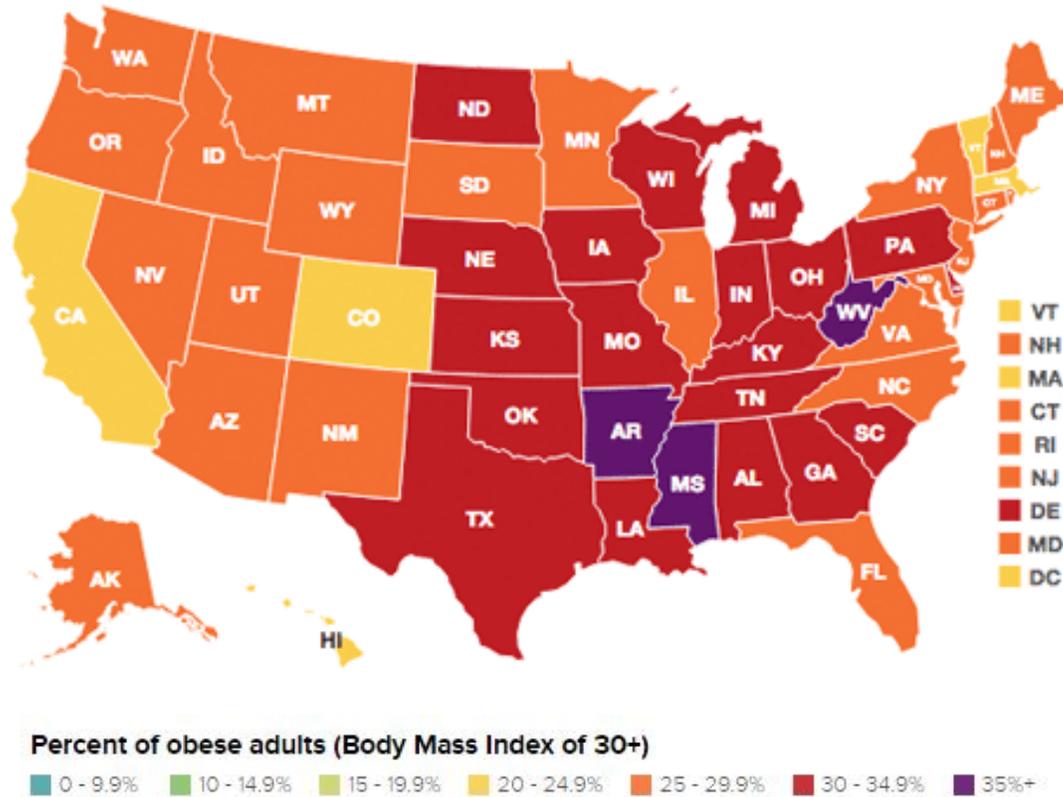
Hypertension in Arkansas

UAMS IPE screenings of Arkansas Marshallese:

- 398 adults screened in 9 screenings
- 40.7% have hypertension
- 38.9% have pre-hypertension
- Only 19.8% have blood pressure in the normal range (below 120/80)



Obesity



Map source: *State of Obesity*, a collaborative project of the Trust for America's Health and the Robert Wood Johnson Foundation

- Obesity is already high in Arkansas and other parts of the south and Midwest, but Pacific Islanders in the region are more likely to be obese than other racial/ethnic groups
- Less likely to be physically active than other racial/ethnic groups in the US
- In 2010, the CDC document that 44% of Pacific Islanders were obese
- Only 19% were at a normal weight
- In Arkansas, UAMS found that out of 398 Marshallese screened:
 - 59% obese (BMI greater than 30)
 - 37% overweight (BMI of 25-30)
 - 10% normal weight (BMI below 25)

The legacy of the Bravo Test – The RMI exhibits one of the highest concentrations of certain types of cancers globally (e.g. leukemia and thyroid), and higher-than-normal instances of continued congenital anomalies amongst the nuclear-affected atoll population

Source: Marshall Islands Nuclear Institute Archives



Runit Dome - Enewetak

Inspection Shows No Significant Leak From RMI Nuclear Dome *Cracks in concrete covering radioactive waste on Runit of no concern*

WELLINGTON, New Zealand (Radio New Zealand International, Aug. 15, 2015) – An expedition to inspect cracks in a dome covering nuclear waste in the Marshall Islands has found no significant surface leaks of radioactive material.

The Runit Dome was constructed in 1979 to temporarily store radioactive waste produced from nuclear testing by the United States military during the 1950s and 1960s.

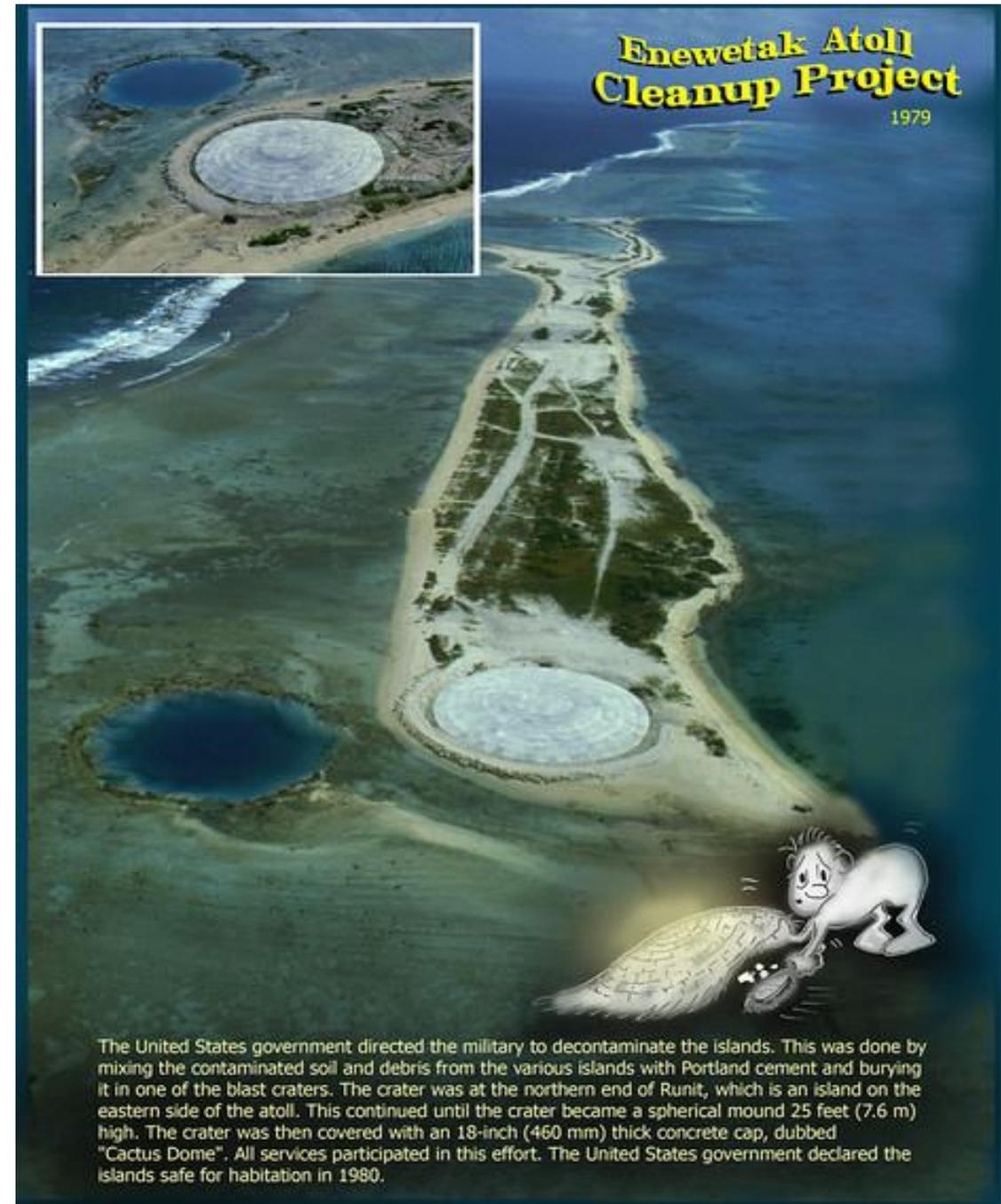
The Marshallese community raised concerns over damage to the dome after Typhoon Nangka hit in July causing significant damage to homes and infrastructure on the atoll.

Our correspondent, Giff Johnson says the team surveying the dome found the cracks have been developing over time.

"One basic surface geiger counter type check of radiation showed nothing above background on the surface of the dome and that there was actually not any damage to the dome."

Giff Johnson says the **bigger risk is the potential for waste to leak from underneath the dome into sediment that could be spread throughout the islands in future storms.**

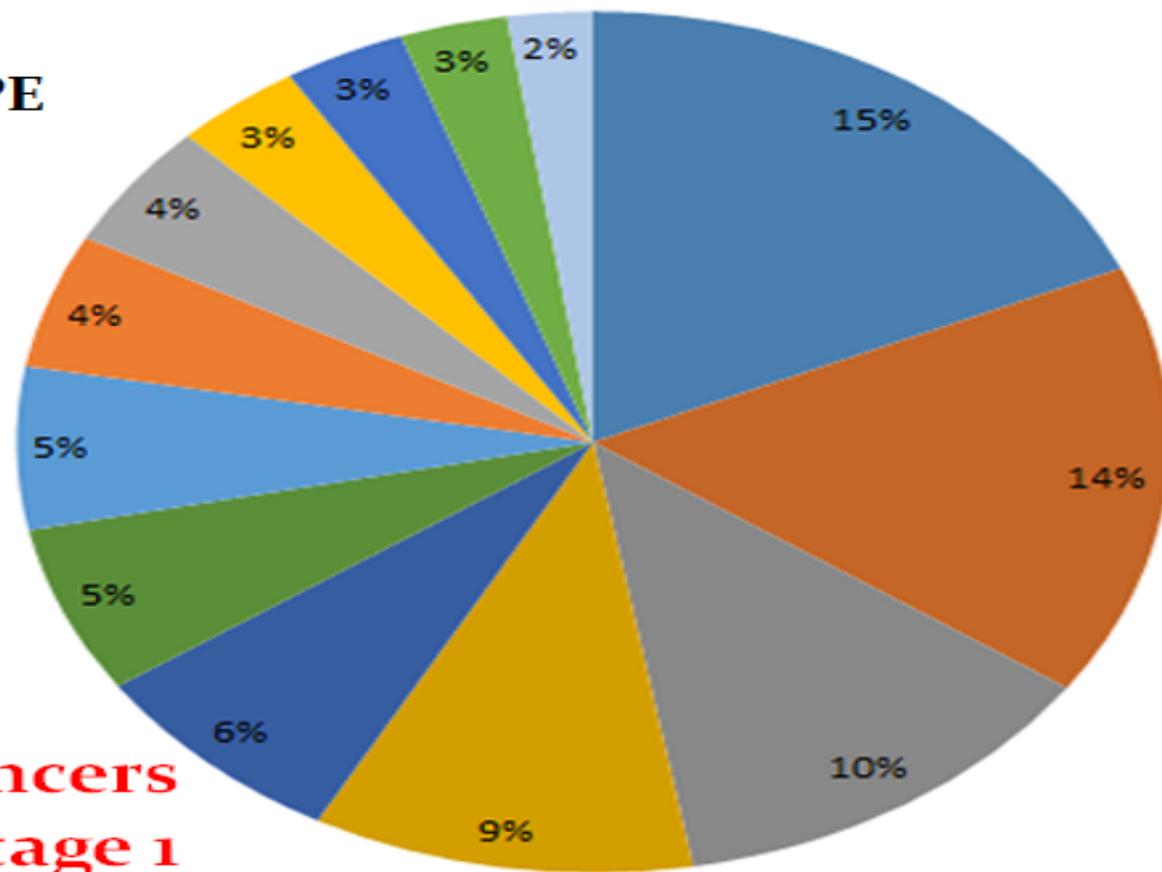
[Radio New Zealand International](#)



The United States government directed the military to decontaminate the islands. This was done by mixing the contaminated soil and debris from the various islands with Portland cement and burying it in one of the blast craters. The crater was at the northern end of Runit, which is an island on the eastern side of the atoll. This continued until the crater became a spherical mound 25 feet (7.6 m) high. The crater was then covered with an 18-inch (460 mm) thick concrete cap, dubbed "Cactus Dome". All services participated in this effort. The United States government declared the islands safe for habitation in 1980.

Distribution of adult cancers in the USAPI 2007-2012 (Chuuk data incomplete)

Top 13 Cancers for all USAPI



- Lung & Bronchus
- Breast
- Prostate
- Colon & Rectum
- Liver
- Cervical Cancer, Invasive
- Uterus
- Leukemia
- Thyroid
- Tobacco-related Oral Cavity & Pharynx
- Stomach
- Nasopharynx
- Ill-defined & unspecified (unknown+misc)

Screening test or PE
57%

Tobacco-related
47%

Obesity-related
36%

HPV-related
6%

Only 26% of cancers diagnosed at Stage 1

37% dead within 5 years of diagnosis

Medical Genetics - Birth Defects

- Medical genetics is mainly a foreign concept among the Marshallese population except when discussed in context with the nuclear legacy of the RMI
- Given the history of the RMI & the US during the nuclear weapons testing program, there is great distrust among the Marshallese population when it come to “studies” or “research” or “screening”
- “Parachute scientists”
- “mosquito scientists”

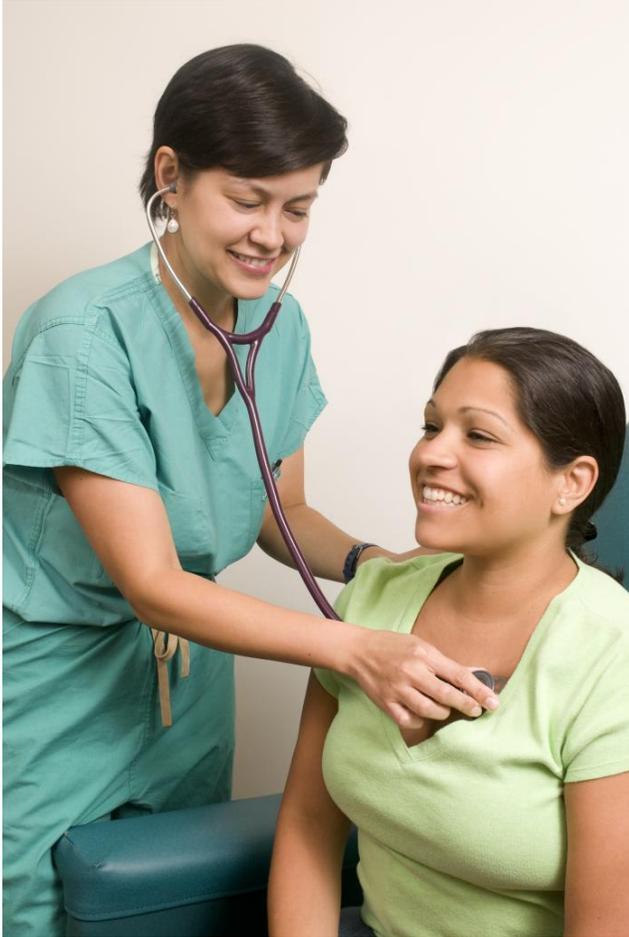
Challenges of the current RMI Health System

- Two main public hospitals on Majuro & Ebeye
- One private primary clinic on Majuro
- Limited specialist services
- Limited qualified staff
- Ad hoc health missions (private, gov't, NGOs)
- Specialty care sought off island
- Poor infrastructure
- Limited health budget

Newborn screening/genetics services

There are no formal newborn screening/genetics services in the RMI

Access to Health Care



- 19.6% of Pacific Islanders in the US live in poverty, compared to 15% of the overall population
- Required to have insurance coverage through Affordable Care Act
- COFA migrants in the US – from RMI, FSM, Palau – are ineligible for Medicaid, even when income requirements are met, which limits access to care
- Linguistic and health literacy barriers to signing up for insurance through Affordable Care Act
- Many have trouble understanding how health plans work and experience confusion over insurance terms and concepts

Needs assessments of Pacific Islanders in the Mid-South region by UAMS and others found:

41%

Had not seen
a doctor in
more than
five years

50%

Were uninsured
in 2012

90%

Speak a
language other
than English at
home

Acknowledgements/Photo credits

- UAMS- NW Office of Community Health & Research
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- Marshall Islands Journal
- Cancer Council of the Pacific Islands