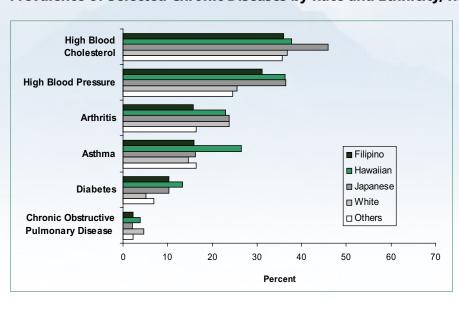
#### **RACE / ETHNICITY = RISK MARKERS FOR HEALTH DISPARITIES**

#### Prevalence of Selected Chronic Diseases by Race and Ethnicity, Hawaii, 2008, 2009



The prevalence of high blood cholesterol is highest among Japanese.

The prevalence of asthma is highest among the Native Hawaiian population.

High blood pressure and diabetes are more prevalent among Native Hawaiians, Filipinos and Japanese.

The prevalence of arthritis is highest among Japanese, whites, and Native Hawaiians.

Source: Behavioral Risk Factor Surveillance System (BRFSS) 2009, COPD Data from 2008 BRFSS.

Available at: http://hawaii.gov/health/statistics/brfss/brfss2009/demo09.html and http://hawaii.gov/health/statistics/brfss/brfss2008/demo08.html.

From 2000 to 2009, the average annual premium (employer and worker share of pre-

miums combined) for Hawaii grew by 94.2

\*Numbers do not add due to rounding.

### **ECONOMIC IMPACT ON HAWAII**

# Rising health care costs have consumed a larger portion of wages

#### Increase in Premiums for Family Coverage in Hawaii, Job-Based Health Insurance, 2000-2009\*\*

Premiums by source of payment	2000	2009	Dollar Change	Percent Change
Total premium spending per worker*	\$6,407	\$11,740	\$5,693	94.2%
Share of premium paid by employer	\$4,735	\$8,981	\$4,246	89.70%
Share of premium paid by worker	\$1,311	\$2,759	\$1,448	110.40%

Available at: http://familiesusa2.org/assets/pdfs/costly-coverage/hawaii.pdf. Data Source: Estimates by Families USA based on Medical Expenditure Panel Survey (MEPS) data.

## Growth in Median Earnings in Hawaii, 2000-2009\*\*

Median Earnings		Dollar	Percent
2000	2009	Change	Change
\$26.180	\$32,912	\$6,732	25.7%

Data Source: Estimates by Families USA based on U.S. Census Bureau's American Community Survey (ACS) data from median worker earnings.

Yet during this same time period, the median earnings of Hawaii's workers rose from \$26,180 to \$32,912—a mere \$6,732, or

## Growth in Premiums in Hawaii for Family Health Coverage Compared to Growth in Earnings, 2000-2009\*\*

2000–2009		Premium Increase	
Percent Change in Total Family Premiums	Percent Change in Median Earnings	as a Multiple of Earnings Growth	
94.2%	25.7%	3.7	

From 2000 to 2009, health insurance premiums for Hawaii's families rose 3.7 times faster than median earnings.

Data Source: Estimates by Families USA.

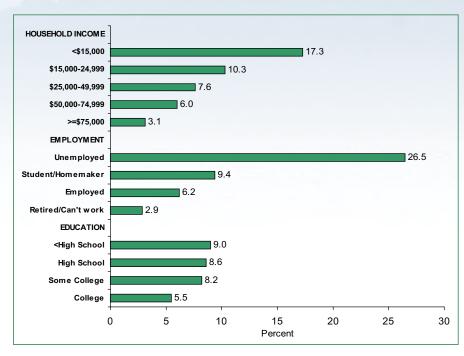
25.7 percent.

MESSAGE: Health insurance premium costs have increased faster than earnings for many of Hawaii's working families.

#### LACK OF HEALTH INSURANCE AND SOCIO-DEMOGRAPHIC FACTORS

The State of Hawaii is regarded as a healthy state in terms of healthcare coverage. However, health care coverage is linked to employment status, education, and income in Hawaii. In addition, limited English language proficiency is high in Hawaii and might present an additional barrier.

#### Selected Socioeconomic Factors by No Health Insurance, Hawaii, 2009



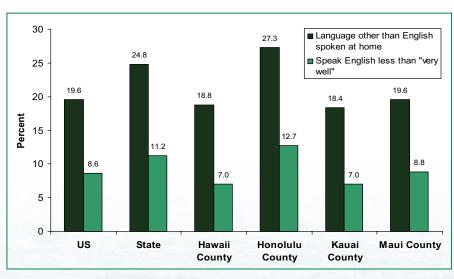
People reporting no health insurance in Hawaii are more likely to:

- have low household income,
- and/or be unemployed,
- and/or have less than a college education.

Source: Behavioral Risk Factor Surveillance System (BRFSS) 2009.

Available at: http://hawaii.gov/health/statistics/brfss/brfss2009/demo09.html.

# Percent of People 5 Years and Over Who Speak a Language Other Than English in the Home and Speak English Less Than "Very Well" by County, Hawaii, 2006–2008



Source: U.S. Census Bureau, 2006-2008, American Community Survey, 2006–2008 American Community Survey 3-Year Estimates.

The state of Hawaii has a greater percentage (24.8%) of non-English speaking households and people with limited English proficiency than the U.S. (19.6%) overall.

Honolulu County has the highest percentage of non-English speaking households and people with limited English proficiency, although there are at least 1 in 6 people in all parts of the state that speak a language other than English at home.



# CHRONIC DISEASE DISPARITIES REPORT 2011: Social Determinants HIGHLIGHTS



**Chronic Disease Management and Control Branch** 

Hawai'i State Department of Health 1250 Punchbowl Street • Honolulu, HI 96813 Phone: (808) 586-4609 • Fax: (808) 587-5340

## NEIL ABERCROMBIE, Governor / LORRETA J. FUDDY, A.C.S.W., M.P.H., Director of Health

Chronic Disease Management and Control Branch / Hawai'i State Department of Health 1250 Punchbowl Street # 210 / Honolulu, HI 96813-2416 / Telephone: (808) 586-4609

Nondiscrimination in Services: We provide access to our activities without regard to race, color, national origin (including language), age, sex, religion or disability. Write or call our Affirmative Action Officer at P.O. Box 3378, Honolulu, HI 96801-3378, or at (808) 586-4616 (voice/tty) within 180 days of the problem.

<sup>\*\*</sup>Source: Families USA, 2009, Costly Coverage: Premiums Outpace Paychecks in Hawaii. Available at: http://familiesusa2.org/assets/pdfs/costly-coverage/hawaii.pdf.

# SCOPE:

The report looks at chronic disease burden though the framework of health disparities and the social determinants of health.

#### **PURPOSE:**

(1) To provide a broad picture of some of the health disparities and social determinants of health that are apparent across all chronic diseases, risk factors and risk markers in Hawaii; (2) To illustrate that these differences follow a social gradient, not just "high" or "low" differences in population groups.

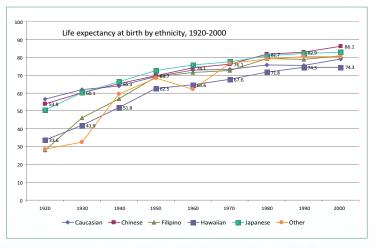
#### **CONTEXT:**

This report covers (1) chronic disease data indicators for disparities in household income, educational level, race/ ethnicity, county, health insurance coverage and (2) county level indicators for chronic diseases, poverty, language and mortality.

Data indicators on occupation, racism, and social context are being gathered but there is currently a lack of linked data on chronic disease and social determinants.

#### **LIFE EXPECTANCY DISPARITIES**

# Life Expectancy at Birth by Ethnicity, Hawaii, 1920–2000



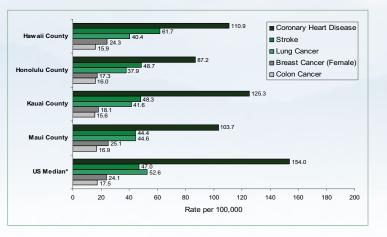
Sources: For data from 1910–1990, Hawaii DBET; For data from 2000 Park, Braun, Horiuchi, Tottori and Onaka (2009). Longevity Disparities in Multiethnic Hawaii: An Analysis of 2000 Life Tables. Public Health Reports, July–August 2009, Vol. 124, p.580.

In Hawaii, life expectancy at birth has increased steadily over the past eighty years.

Life expectancy for the Native Hawaiian population is consistently lower than that of other ethnic groups and was almost 12 years shorter (74.3 years) than the Chinese population which had the highest life expectancy (86.1 years) in 2000.

#### **MORTALITY DISPARITIES**

# Age-Adjusted Mortality Rates per 100,000 for Leading Chronic Disease Causes of Death, Hawaii, 2003–2005



\*For all US Counties

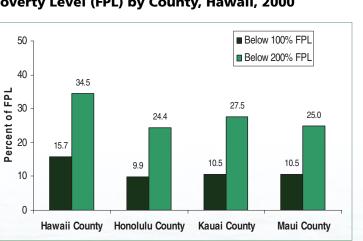
Source: National Center for Health Statistics (NCHS). Vital Statistics Reporting System, 2003–2005. Rates are age-adjusted to the year 2000 standard; per 100,000 population

Highest mortality rates due to Coronary Heart Disease and Stroke are in Hawaii County.

The highest mortality rates due to lung, breast, and colon cancer are in Maui County.

#### **POVERTY DISPARITIES**

# Percent of Population Below 100% and 200% Federal Poverty Level (FPL) by County, Hawaii, 2000



Source: State of Hawaii Primary Care Needs Assessment Data Book 2009. Family Health Services Division, Hawaii Department of Health, January 2010. Available at: http://Hawaii.gov/health/doc/pcna2009databook.pdf.

In 2000, while Hawaii County had the greatest percentage of people living below both 100% and 200% of the federal poverty level, at least one-fourth of the population in each county falls below 200% of the federal poverty level.

At least 10% of the population in each county falls below 100% of the federal poverty level.

#### **LESS INCOME = WORSE HEALTH**

The median measure cuts

the income distribution in

half. Median family income

means that half of the

families make above that

amount, while half make

less than that amount. For

instance, half the families

in Maui County live on

over \$74,840 per year and

Honolulu County has

the highest median and

average family income,

followed by Maui, Kauai

In Hawaii, with the excep-

tion of blood cholesterol,

there is a fairly consistent

association and social gra-

dient between income and

chronic disease, where

those in the lowest in-

come groups report higher

chronic disease prevalence

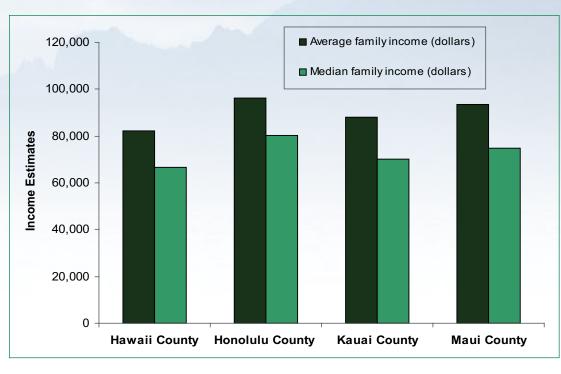
than those in the highest

income group.

and Hawaii Counties.

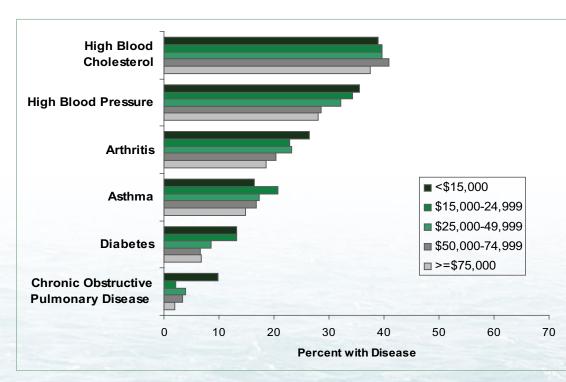
half live on less.

#### Median Family Income and Average Family Income Estimates by County, Hawaii, 2006–2008



Data source: U.S. Census Bureau, 2006-2008 American Community Survey. U.S. Census 2006–2008 American Community Survey 3-Year Estimates.

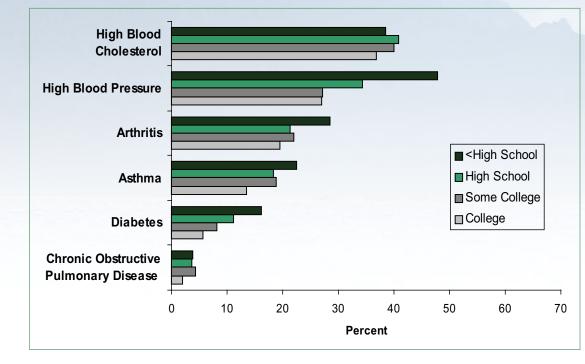
#### Selected Chronic Diseases by Household Income, Hawaii, 2008, 2009



Source: Behavioral Risk Factor Surveillance System (BRFSS) 2009, COPD Data from 2008 BRFSS. Available at: http://hawaii.gov/health/statistics/brfss/brfss2009/demo09.html and http://hawaii.gov/health/statistics/brfss/brfss2008/demo08.html.

#### LESS EDUCATION = WORSE HEALTH

#### Prevalence of Selected Chronic Diseases by Education Level, Hawaii, 2008, 2009



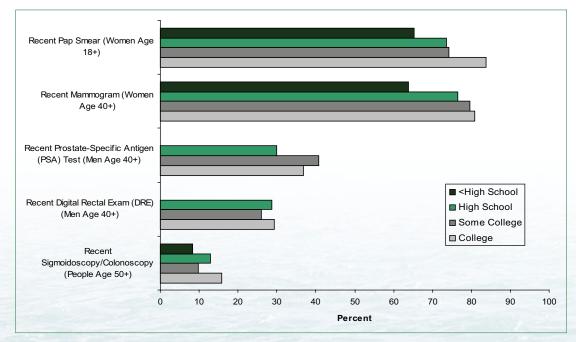
Those with less than a high school education report higher prevalence of high blood pressure, arthritis, asthma, and diabetes.

Prevalence of these conditions follows a fairly consistent social gradient by education level.

Source: Behavioral Risk Factor Surveillance System (BRFSS) 2009, COPD Data from 2008 BRFSS.

Available at: http://hawaii.gov/health/statistics/brfss/brfss2009/demo09.html and http://hawaii.gov/health/statistics/brfss/brfss2008/demo08.html.

#### Recent Cancer Screening by Education Level, Hawaii, 2009



Those with lower educational levels also are less likely to report getting recommended cancer screenings.

This gradient is especially pronounced among women for breast and cervical cancer screening.

For example, among those who with recent cervical cancer screening (less than 3 years ago), 66% reported less than high school education while 84% had a college degree for a difference of 20%. The gradient is less discernable among

Source: Behavioral Risk Factor Surveillance System (BRFSS) 2009. Available at: http://hawaii.gov/health/statistics/brfss/brfss2009/demo09.html. Note: Data missing in recent Prostate and DRE exam respondents with less than high school education due to sample size less than 50.