CANCER

Cancer is defined as a group of related diseases characterized by out-of-control growth and spread of abnormal cells. If the spread is not controlled, abnormal cells may invade other parts of the body, and this can result in death. Cancer may be the result of external and internal factors. Environmental exposures include chemicals, radiation, tobacco smoke, and viruses. Some internal factors are hormones, immune conditions, and inherited genetic mutations. Lifestyle choices can also be risk factors for cancer, such as alcohol and tobacco use, certain sexual and reproductive practices, the use of exogenous estrogens, unprotected sun exposure, poor nutrition, and physical inactivity. Cancer is treated with surgery, radiation, chemotherapy, hormones and immunotherapy. Cancer can be cured if detected and treated promptly, and can be prevented by risk-reducing lifestyle changes (National Cancer Institute, 2007).

Cancer occurs in all cultures, regardless of class, ethnicity, religion, gender identity or sexual orientation. Factors such as acculturation, poverty, access to education, certain occupations, living conditions, including conditions where exposure to environmental toxins, is most common, low cancer screening rates, late diagnosis, and lack of culturally sensitive educational and prevention programs continue to place a toll on the cancer morbidity and mortality rates for Asian Americans, Native Hawaiians and Pacific Islanders (AAs & NHPIs).

PREVALENCE AND RISK FACTORS

While AAs & NHPIs experience lower rates overall compared with other minority groups, they do experience higher death and incidence rates for certain cancers.

Lung cancer is the predominant cancer affecting AAs & NHPIs, and is the number one cause of cancer death for all AA & NHPI ethnic groups, except Asian Indian women (Chu, 2005). Cigarette smoking is the most important risk factor for lung cancer. In the U.S., 80-90% of lung cancer deaths are due to smoking (CDC, 2007). Other risk factors include second-hand smoke, exposure to occupational and/or environmental toxins, radiation exposure, air pollution and tuberculosis.

- Among cigarette smokers in California and Hawaii, Native Hawaiians and other Polynesians are more susceptible to and have higher incidence rates of lung cancer (263.9/100,000) than Whites, Japanese Americans, and Latinos.

AAs & NHPIs are also disproportionately affected by liver cancer, 80% of which is caused by chronic Hepatitis B Virus (HBV) Infection. An estimated 1.4 million Americans are chronically infected with HBV, and over half are AAs & NHPIs.

- **AAs & NHPIs experience the highest incidence rates of liver and stomach cancers for both sexes compared with all racial and ethnic groups.**

- They are 3 to 13 times more likely to die from liver cancer caused by Hepatitis B than Caucasians.
- Liver cancer rates among males are 13 times higher in Vietnamese Americans, 8 times higher in Korean Americans, and 6 times higher in Chinese Americans than Caucasians.
- Up to 20,000 women in the U.S. who give birth each year have chronic HBV infection, and 54% are AA & NHPI women.

Stomach cancer is a growing health concerns for many AA & NHPI subgroups. Studies suggest that people who eat a diet high in foods that are smoked, salted, or pickled may be at increased risk for stomach cancer. On the other hand, eating fresh fruits and vegetables may protect against this disease (National Cancer Institute, 2005). Other factors that may increase the risk for stomach cancer include family history, smoking, alcohol use.

- Overall, AA & NHPI men are twice as likely to have stomach cancer as white men, and AA & NHPI women are 2.7 times as likely as white women to be diagnosed with this illness.

### Top Five Most Commonly Diagnosed Cancers in Females in the United States by Ethnic Group, 1999-2003

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>Filipino</th>
<th>Japanese</th>
<th>Chinese</th>
<th>Vietnamese</th>
<th>Korean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast</td>
<td>Breast 36.0%</td>
<td>Breast 33.1%</td>
<td>Breast 28.4%</td>
<td>Breast 23.3%</td>
<td>Breast 25.0%</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>Colon &amp; Rectum 9.3%</td>
<td>Colon &amp; Rectum 16.3%</td>
<td>Colon &amp; Rectum 14.6%</td>
<td>Colon &amp; Rectum 12.9%</td>
<td></td>
</tr>
<tr>
<td>Lung</td>
<td>Lung 8.3%</td>
<td>Lung 9.3%</td>
<td>Lung 10.9%</td>
<td>Colon &amp; Rectum 10.5%</td>
<td>Stomach 9.4%</td>
</tr>
<tr>
<td>Thyroid</td>
<td>Thyroid 7.0%</td>
<td>Stomach 5.3%</td>
<td>Corpus &amp; Uterus 4.6%</td>
<td>Thyroid 7.1%</td>
<td>Lung 9.1%</td>
</tr>
<tr>
<td>Corpus &amp; Uterus</td>
<td>Corpus &amp; Uterus 6.8%</td>
<td>Thyroid 4.4%</td>
<td>Cervix 6.4%</td>
<td>Thyroid 4.9%</td>
<td></td>
</tr>
</tbody>
</table>

### Top Five Most Commonly Diagnosed Cancers in Males in the United States by Ethnic Group, 1999-2003

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>Filipino</th>
<th>Japanese</th>
<th>Chinese</th>
<th>Vietnamese</th>
<th>Korean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate</td>
<td>Prostate 30.1%</td>
<td>Prostate 28.4%</td>
<td>Prostate 21.6%</td>
<td>Lung 18.0%</td>
<td>Colon &amp; Rectum 14.4%</td>
</tr>
<tr>
<td>Lung</td>
<td>Lung 18.3%</td>
<td>Colon &amp; Rectum 17.5%</td>
<td>Lung 15.7%</td>
<td>Liver 15.0%</td>
<td>Stomach 14.2%</td>
</tr>
<tr>
<td>Colon &amp; Rectum</td>
<td>Colon &amp; Rectum 12.8%</td>
<td>Lung 12.0%</td>
<td>Colon &amp; Rectum 15.3%</td>
<td>Prostate 15.0%</td>
<td>Prostate 13.7%</td>
</tr>
<tr>
<td>Non-Hodgkin’s Lymphoma</td>
<td>Lymphoma 5.1%</td>
<td>Stomach 6.7%</td>
<td>Liver 7.5%</td>
<td>Colon &amp; Rectum 11.8%</td>
<td>Lung 13.6%</td>
</tr>
<tr>
<td>Liver</td>
<td>Liver 4.3%</td>
<td>Bladder 5.6%</td>
<td>Stomach 5.4%</td>
<td>Stomach 5.8%</td>
<td>Liver 10.4%</td>
</tr>
</tbody>
</table>

*Data evaluation and Publication Committee of the North American Association of Central Cancer registries, 2006.*
NATIVE HAWAIIANS & PACIFIC ISLANDERS

For Native Hawaiian males living in Hawaii, the highest mortality rates are for lung and bronchus cancer and colorectal cancer, while lung and bronchus cancer are the most commonly diagnosed. **Both lung cancer incidence and mortality rates are higher in Native Hawaiian men and women than for their non-Hispanic counterparts** (Miller, 2008). In addition, Native Hawaiian females living in Hawaii have the highest mortality rates for breast, lung, and colorectal cancers (Hawaii Cancer Facts and Figures, 2003). While in recent years, mortality rates for many cancers have decreased among Native Hawaiians, they have increased for liver, kidney and uterine cancer among females. Although rates for both incidence and mortality due to cervical cancer have declined over the past couple decades due to screening, racial/ethnic disparities still exist. In Hawaii, Native Hawaiian females have an incidence rate 1.4 time that of Caucasians and more than twice that of Japanese women (Hawaii Cancer Facts and Figures, 2003). Factors such as smoking, obesity, high levels of alcohol consumption, high fat and high calorie diets are thought to contribute to the high rates of cancer in Native Hawaiians.

While there is limited data available on cancer prevalence, incidence, and general socio-survivorship for Pacific Islanders (PIs), anecdotal evidence has shown that PIs have disproportionate rates of cancer compared to other racial/ethnic populations. American Samoan and Tongan men have a 1.5 higher incidence rate for lung cancer than Caucasian men (Miller, 2008). The incidence of stomach cancer is five times higher among American Samoan men than non-Hispanic white men. Likewise, stomach cancer mortality rates are about seven times higher for American Samoan men than their Caucasian counterparts. In Tonga, liver cancer prevalence rates in the adult population are hyper-endemic at 10%-14%, and now lung cancer ranks among the three most common cancers, as a result of smoking, and the incidence is expected to increase (WHO-Regional Office for Western Pacific, 2005).

In Guam, Chamorros had the highest overall age-adjusted cancer mortality rate at 247.2 cases per 100,000, more than 25% higher than the U.S. rate (Guam Comprehensive Cancer Control Coalition, 2007). **More specifically, Chamorros in Guam had a significantly higher incidence of mouth and pharynx, lung and bronchus, colon-rectum-anus, breast, cervical, and prostate cancers, than the U.S. rate.** The six most common cancers in Palau, from 1999-2003, were cancers in lung & bronchus (19% of total incidence cases), cervix uteri (16%), breast (11%), liver & intrahepatic (9%), oral cavity & pharynx (8%) and prostate (8%). Out of these, the six most common cancers among men in Palau, 1999-2003, were cancers of the lung & bronchus (29% of total number of cases), prostate (16%), liver & intrahepatic (16%), pancreas (5%) and oral cavity & pharynx (5%). During the same period, the six most common cancers among women were those of the cervix uteri (26% of total incidence cases), breast (16%), thyroid (10%), lung & bronchus (9%), oral cavity & pharynx (8%) and ovary (4%) (Republic of Palau Ministry of Health, 2006).

CANCER AND AA & NHPI WOMEN

Asian American females are the first American population to experience cancer as the leading cause of death; it has been the number one killer of Asian American women since 1980 (AANCART). Asian American women with breast cancer are more likely to receive a diagnosis at a later stage and have larger tumors at diagnosis as compared to non-Hispanic White women in the U.S. (President’s Advisory Commission on Asian Americans and Pacific Islanders, 2003). AA & NHPI women also have the second highest risk for cervical cancer in California (California Cancer Facts and Figures, 2001).

- Native Hawaiian women have a higher overall cancer rate in comparison to non-Hispanic white women, with 488.5 vs. 448.5 per 100,000, respectively (Miller, 2007)
- Cervical cancer incidence rates are among the highest in the nation for certain AA & NHPI women, such as Laotian (24.8 per 100,000), Samoan (18.1 per 100,000), Vietnamese (16.8 per 100,000) and Cambodian (15.3 per 100,000) women, compared to non-Hispanic White (8.5 per 100,000), Black (11.4 per 100,000), and Hispanic (13.8 per 100,000) from 2000-2004 (Miller, 2007).
- Asian women from Asia living in the U.S. have lower breast cancer rates than white American women, but after one generation, the rates for Asian American women approach those of white women (Kagawa-Singer, 2001).

CANCER AND THE HEALTH CARE SYSTEM

Cultural and linguistic barriers prevent many AAs & NHPIs from accessing the healthcare system. Other barriers noted in an Institute of Medicine report are the health seeking behaviors of patients and the health provider behavior in the clinical encounter (Hawaii Cancer Facts and Figures, 2003). The American Cancer Society (ACS) has found that Asian Americans tend to see doctors as a last resort, lowering their chance of early detection (ACS, 2000).

Socioeconomic status is also a significant and common factor in cancer-related disparities seen among different racial/ethnic groups in the U.S. NHPIs are socioeconomically disadvantaged and underserved in terms of access to health and social services, resulting in poorer health outcomes (Association of Asian Pacific Community Health Organizations, 2004). However, in some AA & NHPI communities, access to healthcare is improving. In Alameda County, access to healthcare improved for Korean American adults with 83% of adults having health insurance coverage in 2002 compared to only 74% in 1994. 48% reported that high cost was a barrier to healthcare in 2002, compared to 58% in 1994 (Korean American Community Health, 2006).

SCREENING AND PREVENTION

Screening reduces mortality by decreasing incidence and by detecting a higher proportion of cancer at earlier, more treatable stages. Available screening tests include breast self-exams, clinical breast exams, and mammograms for breast cancer, PSA test for prostate cancer, fecal occult blood test (FOBT) for colon and rectum cancers, and pap smear tests for cervical cancer. Also, the Hepatitis B Virus (HBV) vaccine prevents HBV disease and its serious consequences like liver cancer.

Minority women and women with low socioeconomic levels are significantly less likely to receive preventive care such as mammography and Pap test screening. A study looking at Pap smear use among minority women in California found that access factors, such as lack of a usual source of care of health insurance, are important barriers to cervical cancer screening. The study concluded that culturally sensitive interventions and
educational campaigns that promote access to healthcare and screening awareness would have a positive impact on Pap smear use, especially among recent immigrants (De Alba et al., 2004).

**REFERENCES**


Center for Disease Control and Prevention, Hepatitis B Vaccine: Factsheet. Available at: www.cdc.gov/hepatitis.


Korea American Community Health: Improvements over Time Observed but Still Room for More Improvement. Press Release by Center for Family and Community Health at the University of California, Berkeley School of Public Health, Asian Health Services, and Korean Community Advisory Board, August 17, 2006.


President’s Advisory Commission on Asian Americans and Pacific Islanders, Asian Americans and Pacific Islanders Addressing Health Disparities: Opportunities for Building a Healthier America, 2003.


