



NATIVE HAWAIIANS AND PACIFIC ISLANDERS & CANCER

WHO WE ARE

Native Hawaiians and other Pacific Islanders of Polynesian, Micronesian and Melanesian ancestry constituted approximately 0.1 percent (399,000) of the total US population in 2000. ⁽¹⁾ This small subgroup is comprised of more than 25 diverse groups with variations in historical backgrounds, languages, and cultural traditions. Among Pacific Islanders in the US, Native Hawaiians are the largest group (211,014, 58%); followed by Samoans (62,964, 17.2%); Chamorros (49,345, 13.5%); Tongans (5%), Fijians (1.9%), and other Pacific Islanders from the Pacific Basin. Seventy-five percent of Pacific Islanders live in California and Hawaii. They are a relatively young population, with a median age of 25 years, and an average family size of 4.1. Poverty rates are higher among Pacific Islanders, who have a per capita income 27% below the national average. ^(2,3) Native Hawaiians are defined as the indigenous peoples of and constitute approximately 19 percent of the State of Hawaii's population of 1,108,229. The Native Hawaiian category is inclusive of full-blooded Hawaiians, who number less than 5,000, and part Hawaiians. ⁽⁴⁾ The US Associated Pacific consists of six island jurisdictions: Guam, American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI); and The Republic of the Marshall Islands (RMI), Republic of Belau (ROB), and the Federated States of Micronesia (FSM), comprised of four states, Chuuk, Yap, Kosrae and Pohnpei. As an aggregate group, Native Hawaiians and Pacific Islanders are socioeconomically disadvantaged and underserved in terms of access to health and social services, a significant and common factor in the disparity among US groups with higher mortality and lower survival rates from cancer. In addition, Pacific Islanders have significantly elevated rates of health-related high-risk behaviors such as smoking, high consumption of alcohol, and obesity, as well as diets that are high in calories, cholesterol saturated fat, salt, and protein. Additional factors contributing to significant health barriers for these groups include decreased access to or lack of cancer prevention and control programs, the inability or lack of cancer prevention and education programs to effectively disseminate information and treatment to this population, inadequate data collection, and the lack of cultural sensitivity on the part of non-indigenous health care professionals. ⁽⁵⁾ With the exception of Native Hawaiians residing in Hawaii, no systematic data collection on cancer incidence and mortality exists for Pacific Islanders. For most of the Pacific jurisdictions, cancer surveillance and databases are rudimentary or non-existent. Because surveillance and health infrastructure are lacking, their cancer burden remain unknown or are unstable due to small numbers. ⁽⁵⁾



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NATIVE HAWAIIANS AND PACIFIC ISLANDERS & CANCER

STATISTICAL CANCER FACTS FOR NATIVE HAWAIIANS AND PACIFIC ISLANDERS

NATIVE HAWAIIANS:

- ◆ Native Hawaiians had the second highest overall incidence rate of cancer, and the highest age-adjusted cancer mortality rates in Hawaii when compared with other ethnic groups. Cancers of the lung and bronchus, prostate, colon and rectum, and stomach, and non-Hodgkin's lymphoma are the five most frequently diagnosed cancers for Native Hawaiian males; for females they are cancers of the breast, lung and bronchus, colon and rectum, corpus uteri, and stomach. ⁽⁶⁾
- ◆ Hawaiian women living in Hawaii have a mortality rate 2.6 times higher than the general state population, and a national breast cancer incidence rate placing them second among all US women. ^(7,8)
- ◆ All-site cancer mortality rates for Native Hawaiians, the largest of the Pacific Islander populations, are the second highest of all racial/ethnic groups (207.2 per 100,000 population), and closely rival those of African Americans (209.8 per 100,000 population). ⁽⁸⁾
- ◆ Native Hawaiians have the third highest breast cancer mortality rate in the nation and the highest breast cancer mortality rate in the state of Hawaii. ⁽⁸⁾
- ◆ In Hawaii, when compared with the four other major ethnic groups (Caucasian, Japanese, Chinese and Filipino), Native Hawaiian women had the highest cancer mortality rates for all cancers combined, and for cancers of the lung, liver, pancreas, breast, cervix uteri, corpus uteri, stomach, and rectum. Native Hawaiian males ranked highest for all cancers combined, and for cancer of the lung, liver, and pancreas. ^(8,9)
- ◆ Native Hawaiians have the highest mortality rates in the Nation for cancers of the corpus uteri and stomach; second highest mortality rates in the Nation for all-cancers combined and for cancers of the lung, pancreas, and ovary; and the third highest mortality rates for breast cancer as seen in disaggregated Asian/Pacific Islander cancer data. ⁽⁹⁾
- ◆ For Native Hawaiian males, mortality rates (1976-1990) have increased 62% for all cancers. ⁽¹⁰⁾
- ◆ By site, the largest increases between 1976 and 1990 in mortality rates for Native Hawaiian males occurred in cancers of the colon (228%), rectum (117%), pancreas (83%), lung (74%), and prostate (117%). ⁽¹⁰⁾
- ◆ For Native Hawaiian females, mortality rates increased 123% for all cancers combined between 1976 and 1990 and for all cancer sites listed, particularly for cancers of the colon (134%), liver (135%), lung (293%), breast (158%), and corpus uteri (313%). ⁽⁹⁾
- ◆ Native Hawaiian women have the highest incidence and mortality rates of endometrial cancers for all US women. ⁽⁸⁾
- ◆ The percentage of Native Hawaiian males and females who die from pancreatic cancer each year is actually greater than the percentage of Native Hawaiians who are diagnosed with pancreatic cancer each year. This implies that for many Native Hawaiians, pancreatic cancer is found only upon autopsy. ⁽⁸⁾
- ◆ While Native Hawaiian males and White males and females all have lower mortality rates than incidence rates for lung cancer, the lung cancer mortality rate for Native Hawaiian females is 2% higher than the incidence rate for lung cancer. ⁽⁵⁾
- ◆ Native Hawaiian males and females both show higher incidence and mortality rates than Whites for lung cancer - the leading cause of cancer deaths in the US. This same phenomenon is observed with colorectal cancer for Native Hawaiian men aged 55-69, and pancreatic cancer (overall), which accounts for only 2% of new US cancer cases but is more likely to lead to death than any other cancer. ⁽⁸⁾
- ◆ Overall, Native Hawaiian females have lower cancer incidence rates but higher mortality rates than their White counterparts. For example, although their uterine cancer incidence rate is lower than that for White females, Native Hawaiian females have a disproportionately higher uterine cancer mortality rate than do their White counterparts. ⁽⁸⁾
- ◆ For Native Hawaiian males, incidence rates for liver and non-Hodgkin's lymphoma are lower than that for their White counterpart, but mortality rates for these cancers in Native Hawaiian men exceed that for White males. ⁽⁸⁾
- ◆ Once diagnosed with cancer, outcomes are poorer for Native Hawaiians as indicated by a 5-year relative survival rate that is 18% lower than Whites and 15% lower than US (all races) for all cancer combined. With the exception of cancers of the stomach and ovary, Native Hawaiians had lower 5-year relative survival rates for 12 other cancer sites when compared to US (all races). ⁽⁹⁾

US ASSOCIATED PACIFIC ISLANDERS:

- ◆ For American Samoan males in Hawaii, the most common cancer sites are the same sites as for those in Los Angeles, whereas for females the most common cancer sites are breast, uterus, blood, cervix, and thyroid. In Hawaii, when compared with Native Hawaiians, American Samoans have a higher age-adjusted, site-specific relative risk for cancers of the nasopharynx (especially males), liver, prostate,
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NATIVE HAWAIIANS AND PACIFIC ISLANDERS & CANCER

thyroid, and a lower relative risk for cancers of the colon, rectum (especially males), lung (especially females), and breast. Compared with whites diagnosed with cancer in Hawaii, American Samoans have a higher relative risk for cancers of the nasopharynx (especially males), stomach, liver, lung (especially males), uterus, thyroid, and blood, and a lower relative risk for cancers of the colon, skin, breast, testes, cervix, bladder (especially males), and lymph nodes. ^(11,12)

- ◆ Marshallese Islander females have higher breast and cervical cancer rates that are 5 and 75 fold, respectively, compared to overall US rates. ⁽¹³⁾
- ◆ A study of death certificates in Guam from 1971 to 1995 revealed that lung cancer accounted for one-third of all cancer deaths. ⁽¹⁴⁾
- ◆ With the exception of the Federated States of Micronesia, all the Pacific jurisdictions (Republic of Palau, Guam, American Samoa, Republic of the Marshall Islands and the Commonwealth of the Northern Marianas) listed cancer as one of the top three causes of death. ⁽¹⁵⁾
- ◆ Age-adjusted, sex- and site-specific cancer incidence rates were higher in virtually every category in the Republic of the Marshall Islands (RMI) compared with the US for the period 1985-1994. RMI lung cancer rates were 3.8 times higher in males and 3.0 times higher in females, cervical cancer rates were 5.8 times higher, gastrointestinal tract rates were 1.9 times higher in males and 8.5 times higher in females, breast cancer rates were 1.4 times higher, urinary tract rates were 5.8 times higher in females, oral cancer rates were 3.4 times higher in males and 1.5 times higher in females, thyroid cancer rates were 7.2 times higher in females, and liver cancer rates were an alarming 15.3 times higher in males and 40.0 times higher in females, compared with US rates. ⁽¹⁵⁾
- ◆ Although cancer deaths may be underreported because many Guam residents die away from home, cancer was the second leading cause of death for the years 1988-1990 and accounted for 15% of all causes of death. ⁽¹⁶⁾
- ◆ For the years 1989-1991, 61% of cancer deaths occurred in the Chamorro and Pacific Islander populations of Guam. Among Chamorros, the leading site was lung cancer (37%) followed by oral cavity, breast, cervix, and colorectal cancers. Men experienced considerably higher cancer mortality rates than females, and the majority of cancer deaths occurred in persons 60 years of age and older. ⁽¹⁷⁾
- ◆ A review of data from the Commonwealth of the Northern Marianas revealed that the mean age-adjusted incidence rate for cervical cancer was nine times higher for Chamorro females (69.1/100,000) than for US Whites (7.5/100,000). For Carolinian females (151.1/100,000) the rates were 20 higher than for US Whites. ⁽¹⁸⁾
- ◆ In the Republic of Palau, among both men and women combined, the age-adjusted cancer incidence rate is 177.4/100,000, 201/100,000 for males, and 172.1/100,000 for females. ⁽¹⁹⁾
- ◆ Among the Department of Energy defined population exposed to radioactive fallout from US atomic bomb testing in the Marshall Islands, thyroid adenomas and cancer began appearing 10 years after exposure and became an acknowledged major long-term medical problem. From 1954 through 1994, 56 thyroid tumors have been identified, and of these 17 were malignant. ^(20,21,22)
- ◆ The site-specific cancer incidence (all cancers combined) from 1985 to 1994 for Marshallese males and females is 563.2/100,000 and 883.0/100,000, respectively. The most commonly reported cancers in Marshallese men are lung and bronchus, liver, oral cavity, prostate, and digestive system cancers. For women, they are cervix, breast, lung and bronchus, urinary system, liver, and thyroid cancers. The age-adjusted sex and site-specific cancer incidence rates have been noted to be higher than the US rates for virtually every site in the Marshallese population. ⁽¹³⁾
- ◆ Data drawn from American Samoans living in Hawaii and Los Angeles County in California revealed that American Samoan males were ten times more likely to have nasopharyngeal cancer, seven times more likely to have liver cancer, and three times more likely to have stomach cancer than their White counterparts. ⁽¹²⁾
- ◆ The five most common cancers in American Samoan males in Los Angeles are lung, prostate, stomach, blood, and liver. For American Samoan females, the most common cancer sites are breast, lung, cervix, uterus, and stomach. ⁽¹²⁾
- ◆ The most common cancers in Palauan males are prostate (78.2/100,000), lung and bronchus (38.3/100,000), liver (35.5/100,000), and oral cavity and pharynx (20.8/100,000). For Palauan females, the most common cancers are cervix (38.4/100,000), breast (25.0/100,000), uterus (18.6/100,000), non-Hodgkin's lymphoma (18.3/100,000), and lung and bronchus (13.1/100,000). ⁽¹⁹⁾
- ◆ The five most common cancer deaths for males in the Republic of Palau are liver (47.2/100,000), lung and bronchus (27.9/100,000), prostate (15.4/100,000), and oral cavity and pharynx (3.5/100,000). For females, the five most common cancer deaths are cervix (20.0/100,000), lung and bronchus (16.3/100,000), breast (11.3/100,000), uterus (8.5/100,000), and non-Hodgkin's lymphoma (2.1/100,000). ⁽¹⁹⁾
- ◆ Cancer is the third leading cause of death in the Republic of the Marshall Islands. ⁽²⁰⁾

Additional facts and information on Native Hawaiians and Pacific Islander populations can be found at <http://iccnetwork.org/cancerfacts>

NATIVE HAWAIIANS AND PACIFIC ISLANDERS & CANCER

REFERENCES:

1. Honolulu Star Bulletin. Hawaiians, Pacific Islanders tallied. 2001 March 13; pg.1.
2. US Department of Commerce Bureau of the Census. We the American Pacific Islanders. Washington, DC.: US Government Printing Office, 1993.
3. Institute of Medicine. Feasley JC, Lawrence RS, editors. Pacific partnerships for health: charting a course for the 21st century. Washington DC.: National Academy Press, 1998.
4. State of Hawaii, Office of Hawaiian Affairs. Native Hawaiian Data Book. Honolulu; 1999.
5. Shinagawa SM, Kagawa-Singer M, Chen M, Tsark J, Palafox N, Mackura, G. Cancer registries and data for "Asian Americans" and "Native Hawaiians and Pacific Islanders": What registrars need to know. *Journal of Registry Management* 1999; 26(4):128-141.
6. Chu KC. Cancer data for Asian Americans and Pacific Islanders. *Asian American and Pacific Islander Journal of Health* 1998; 6(2):130-9.
7. Look MA, Braun KL. A mortality study of the Hawaiian people 1910-1990. Honolulu (HI): The Queen's Health System; 1995; 10-11.
8. Miller BA, Kolonel LN, Bernstein L, Young Jr JL, Swanson GM, West D, Key CR, Liff JM, Glover CS, Alexander GA, et al., editors. Racial/ethnic patterns of cancer in the United States 1988-1992. Bethesda, MD: National Cancer Institute; 1996. NIH Pub. No. 96-4104. Available from: URL: <http://www-seer.ims.nci.nih.gov/Publications/REPOC/>
9. Tsark J. Cancer in Native Hawaiians. *Pacific Health Dialog* 1998; 5(2):315-27.
10. Cancer Research Center of Hawaii. Hawaii Tumor Registry Data Report. Honolulu HI, 1998.
11. Hughes CK, Tsark JU, Kenui CK, Alexander GA. Cancer research studies in Native Hawaiians and Pacific Islanders. *Ann Epidemiol* 2000; 10(8 Suppl):S49-60.
12. Mishra SI, Luce-Aoelua P, Wilkens LR, Bernstein L. Cancer among American-Samoans: site-specific incidence in California and Hawaii. *Int J Epidemiol* 1996; 25(4):713-21.
13. Palafox NA, Johnson DB, Katz AR, Minami JS, Briand K. Site specific cancer incidence in the Republic of the Marshall Islands Cancer 1998; 83(S8):1821-4.
14. Haddock RL, Naval CL. Cancer in Guam: a review of death certificates from 1971-1995. *Pacific Health Dialog* 1996; 4(1):66-75.
15. Institute of Medicine. Haynes MA, Smedley BD, editors. The unequal burden of cancer. An assessment of NIH research and programs for ethnic minorities and the medically underserved. Washington, DC: National Academy Press; 1999.
16. Bach F. Cancer registration in Guam. South Pacific Commission, Noumea, 1992.
17. Department of Public Health and Social Services. Annual Statistical Report. Office of Vital Statistics, Department of Public Health and Social Services, Territory of Guam, Agana, 1993.
18. Commonwealth of the Northern Mariana Islands Department of Public Health (CNMIDPH). Annual Public Health Progress Report 1995. Saipan, 1995.
19. Republic of Palau Ministry of Health, Bureau of Public Health. Annual Report 1997. Koror, 1998.
20. Bureau of Health Planning and Statistics. Marshall Islands Vital and Health Statistics Abstracts 1992-1996. Majuro: Ministry of Health and Environment; 1997.
21. Cronkite EP, Bond VP, Conrad RA. Medical effects of exposure of human beings to fallout radiation from a thermonuclear explosion. *Stem Cells* 1995; 13(Suppl 1):49-57.
22. Howard JE, Vaswani A, Heotis P. Thyroid disease among the Rongelap and Utirik population—an update. *Health Phys* 1997; 72(7):190-8.