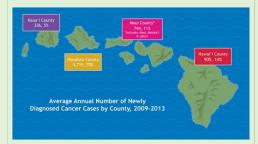


# Hawai'i Tumor Registry: Tracking the Burden of Cancer Statewide 🔍 💜

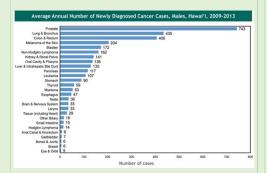


#### Cancer in Hawai'i

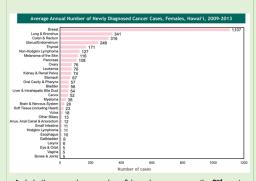
- ▶ More than 60,000 Hawai'i residents are currently living with cancer. ► Approximately 6,700 Hawai'i residents are diagnosed with invasive
- cancer each year ▶ More than 2,200 Hawai'i residents die of cancer each year.
- Cancer is the 2<sup>nd</sup> leading cause of death (after cardiovascular disease) in Hawai'i residents.



▶ Prostate cancer is the most common cancer diagnosed in Hawai'i men.



Breast cancer is the most common cancer diagnosed in Hawai'i women.



- ▶ In both men and women, lung & bronchus cancer are the 2<sup>nd</sup> most commonly diagnosed malignancy.
- ▶ Colon & rectum cancer are the 3<sup>rd</sup> most frequently diagnosed cancer in Hawai'i
- ▶ During the period of 2009-2013, the statewide average annual incidence rate for all cancers combined was 444 per 100.000 in males and 403 per 100,000 in females.

# Cancer Across Hawai'i's Multiethnic Population

Cancer incidence and mortality varied substantially across Hawai'i's five largest racial/ethnic groups (Chinese, Filipinos, Native Hawaiians, Japanese, and Whites). Certain cancers are uniquely prominent among Hawai'i's smaller racial/ethnic groups (American Indian, Black, Korean, Micronesian, Samoan, and Vietnamese). Overall cancer incidence was highest for White males and Native Hawaiian females, while overall cancer mortality (death) was highest for Native Hawaiian males and females.

- ▶ Prostate cancer incidence rates are highest among Filipinos while mortality rates are highest in Native Hawaiians.
- ▶ Native Hawaiians have the highest rates of newly diagnosed cases and deaths from breast cancer compared to Whites, Japanese, Filipinos, and Chinese.



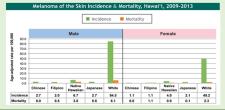


- ▶ Colon & rectum cancer incidence is highest for Japanese males and females while mortality is highest for Native Hawaiian males and
- ▶ Native Hawaiian males and females have the highest incidence and mortality rates from lung & bronchus cancers.





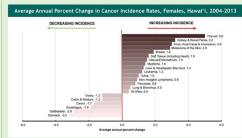
- ▶ The incidence and mortality of melanoma of the skin were highest for White males and females
- ▶ Thyroid cancer incidence was highest for Filipino males and females; mortality was highest for both Filipino and Native Hawaiian males and





# **Trends in Cancer Incidence**

- ▶ Overall incidence rates remained stable in males while increasing in females; overall deaths decreased in both sexes.
- ▶ Increased incidence in males for thyroid, kidney & renal pelvis, liver & intrahepatic bile duct, myeloma, soft tissue (including heart), testis, leukemia, non-Hodgkin lymphoma, and pancreas.
- Decreased incidence in males for prostate, stomach, lung & bronchus, larynx, colon & rectum.
- ▶ Increased incidence in females for thyroid, kidney & renal pelvis, anus, melanoma, breast, soft tissue (including heart), uterus/endometrium, myeloma, liver & intrahepatic bile duct, leukemia, vulva, non-Hodgkin lymphoma, pancreas, lung & bronchus.
- ▶ Decreased incidence in females for stomach, gallbladder, esophagus, cervix, ovary, and colon & rectum.





#### Cancer in Hawai'i vs the U.S.

- ▶ Cancer incidence rates in Hawai'i were significantly lower than the U.S. overall
- Among all U.S. states. Hawai'i ranks #1 for stomach cancer incidence and mortality, #1 for thyroid cancer mortality, and #2 for liver & intrahepatic bile duct cancer incidence.
- ▶ Higher incidence rates for breast, colon & rectum, liver/IBD, pancreas. stomach, thyroid, uterus/endometrium.
- ▶ Lower incidence rates for bladder, brain & nervous system, esophagus, Hodgkin lymphoma, kidney & renal pelvis, larynx, leukemia, lung & bronchus, myeloma, mesothelioma, non-Hodgkin lymphoma, ovary, and prostate.

# Cancers with Higher Incidence in Hawai'i Compared to the U.S., 2009-2013

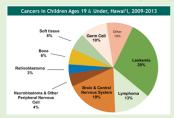
Site		U.S. Incidence Rate	
Breast (Female)	134.4	123.3	6
Colon & Rectum	44.3	40.6	11
Liver & Intrahepatic Bile Duct	11.0	7.6	2
Pancreas	13.6	12.3	6
Stomach	9.4	6.7	1
Thyroid	15.9	14.0	10
Uterus/Endometrium	30.4	25.6	10

### Cancers with Lower Incidence in Hawai'i Compared to the U.S., 2009-2013

Site	Hawai'i Incidence Rate	U.S. Incidence Rate	Rank Among U.S. States
Bladder	13.7	20.7	50
Brain & Nervous System	4.2	6.6	50
Esophagus	3.5	4.7	49
Hodgkin Lymphoma	1.8	2.7	50
Kidney & Renal Pelvis	13.5	16.0	49
Larynx	2.4	3.6	47
Leukemia	11.9	13.4	44
Lung & Bronchus	47.2	62.4	46
Myeloma	5.6	6.4	45
Mesothelioma	0.5	1.0	50
Non-Hodgkin Lymphoma	18.1	19.1	33
Ovary	9.7	11.6	50
Prostate	96.5	123.1	49

#### Cancer in Children

- ▶ Less than 1% of all cancers occur in children ages 19 years and younger.
- ► Approximately 66 keiki are diagnosed with cancer annually in Hawai'i .
- ► Cancer is the 2<sup>nd</sup> leading cause of death in keiki ages 1 14 years.
- ▶ Leukemia is the most common cancer in our keiki at 29% or ~20 cases/year.



# National Cancer Institute's, Surveillance, Epidemiology and End Results (SEER) Program

- ▶ In 1973, Hawai'i joined the NCI SEER Program as a founding member.
- ► Hawai'i Tumor Registry (HTR) is 1 of 19 NCI-funded SEER Program registries
- ▶ Since 1973, HTR has provided comprehensive cancer surveillance and data collection activities, and serves as a resource for cancer research and control efforts in Hawai'i, the Western Pacific, and the U.S.
- Confidential cancer reporting is mandated by Hawai'i state law.
- ▶ De-identified cancer data are provided to the NCI and contributes to national cancer statistics, ht

