# **News Highlights**

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# UH CANCER CENTER RESEARCHERS FOUND HIGH MORTALITY DUE TO CANCER-ASSOCIATED SEPSIS IN NATIVE HAWAIIANS

**HONOLULU** – Native Hawaiians experience a higher mortality risk due to cancer-associated sepsis than other ethnic groups, University of Hawai'i Cancer Center researchers found in the analysis of the Multiethnic Cohort.

"Identification of ethnicity-related genetic factors of sepsis may aid in developing better prevention, early detection, and effective treatment approaches for cancerassociated sepsis," said Michelle L. Matter, PhD, lead author and associate researcher in the UH Cancer Center's Cancer Biology Program.



## Michelle Matter

"Prior work from the UH Cancer Center has identified that Native Hawaiians have a higher mortality rate from cancer than individuals from other racial and ethnic groups in the State. This research identifies one reason why these disparities may exist. It is critically important to continue research into the causes, and outcomes, of cancer among patients from all of the diverse populations in Hawai'i in order to eliminate cancer health disparities," said Center Director, Dr. Randall Holcombe.

#### **Sepsis**

Sepsis is the body's life-threatening response to infection that can lead to tissue damage, organ failure and death. Currently there are limited treatment options for patients who develop sepsis. People with cancer are particularly susceptible to developing sepsis due to suppression of the immune system that can occur from the cancer itself or from surgery, chemotherapy or radiation therapy used to treat the disease. Cancer-associated sepsis represents 8.5 percent of all cancer deaths that occur annually in the U.S.

#### **Multiethnic Cohort**

The MEC is a prospective epidemiological study in which 215,000 residents of Hawai'i and Los Angeles, aged 45-75 at recruitment in 1993-1996, completed a questionnaire about their dietary habits. The participants are being followed for occurrence of cancer and other chronic diseases.

Native Hawaiians have higher cancer-associated sepsis mortality rates

Among 49,794 MEC participants with cancer there was a significant two times higher sepsis mortality rate in Native Hawaiians compared with other ethnic groups. The findings suggest ethnicity-related predispositions of cancer patients to develop sepsis.



#### Gertraud Maskarinec

"Our next steps to understand the risk of sepsis in MEC participants diagnosed with cancer are to separate different cancer sites and to look at the combination of causes of death," said Gertraud Maskarinec, PhD, author and researcher in the Center's Cancer Epidemiology Program.

### **PLOS ONE publication**

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The University of Hawai'i Cancer Center through its various activities, cancer trial patients and their guests, and other visitors adds more than \$54 million to the O'ahu economy. It is one of only 69 research institutions designated by the National Cancer Institute. Affiliated with the University of Hawai'i at Mānoa, the Center is dedicated to eliminating cancer through research, education, patient care and community outreach with an emphasis on the unique ethnic, cultural, and environmental characteristics of Hawai'i and the Pacific.

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