

JAN 17 2019

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# A BILL FOR AN ACT

RELATING TO CANCER RESEARCH.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. The legislature finds that liver cancer in  
2 Hawai'i occurs at extremely high rates. According to the United  
3 States Center for Disease Control and the University of Hawai'i  
4 Cancer Center, Hawai'i has had the highest or second highest rate  
5 of liver cancer in the country in recent years.

6           Every year in Hawai'i there are one hundred eighty-four  
7 newly diagnosed cases of liver cancer, including bile duct  
8 cancer, according to the Hawaii Tumor Registry. From 2004 to  
9 2013, available data on liver cancer indicated an annual  
10 increase in Hawai'i of 2.1 per cent in males and 1.3 per cent in  
11 females, while the incidence of many other cancers such as  
12 colon, lung, prostate, and stomach cancer declined. There are  
13 currently approximately one thousand patients in Hawai'i fighting  
14 liver cancer and bile duct cancer, both of which are almost  
15 always fatal.



1           Liver cancer, which starts in the liver and includes bile  
2 duct cancer, is most commonly caused by the hepatitis B virus,  
3 hepatitis C virus, and heavy alcohol consumption. In Hawai'i  
4 however, these factors are near the national average, which  
5 suggests that other factors may be contributing to the high  
6 occurrence of liver cancer in the State. Other factors that can  
7 cause liver cancer are liver fluke infection (a type of  
8 parasitic flatworm found in fish, shrimp, and vegetables grown  
9 in fresh water) and eating foods containing aflatoxins (a fungus  
10 abundant in warm and humid regions that can grow on foods such  
11 as grains and nuts stored improperly). Since there is virtually  
12 no data on liver fluke infection and aflatoxin exposure in  
13 Hawai'i, the State is unable to adequately make causative  
14 connections between these factors and liver cancer.

15           The University of Hawai'i Cancer Center is preparing to  
16 conduct a three-year, \$1,100,000 study to examine the prevalence  
17 of liver fluke infection, aflatoxin ingestion, and intrahepatic  
18 bile duct dilation in the general population and liver cancer  
19 patients in Hawai'i, and examine any associations with  
20 participant characteristics, such as ethnicity. The Cancer



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1 Center has indicated that it will need \$340,000 for the first  
2 year of the study and \$380,000 for each of the remaining years.

3 The purpose of this Act is to make an appropriation to the  
4 University of Hawai'i Cancer Center to determine if the reasons  
5 Hawai'i has the highest incidence in the country of liver and  
6 bile duct cancer is due to liver fluke infection, aflatoxin  
7 ingestion, and intrahepatic bile duct dilation in Hawai'i.

8 SECTION 2. There is appropriated out of the general  
9 revenues of the State of Hawaii the sum of \$340,000 or so much  
10 thereof as may be necessary for fiscal year 2019-2020 and the  
11 same sum or so much thereof as may be necessary for fiscal year  
12 2020-2021 for the University of Hawai'i Cancer Center to  
13 determine the reasons that Hawai'i has the highest incidence of  
14 liver and bile duct cancer in the country.

15 The sums appropriated shall be expended by the University  
16 of Hawai'i for the purposes of this Act.

17 SECTION 3. This Act shall take effect on July 1, 2019.

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INTRODUCED BY:

*Kal Abush*

*Breene Hunt*

*Ronald H. Baker*



# S.B. NO. 95

**Report Title:**

Cancer Research; Liver Cancer; UH Cancer Center; Appropriation

**Description:**

Appropriates funds to the UH Cancer Center to determine the reasons that Hawai'i has the highest incidence of liver and bile duct cancer in the country.

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