

Cambodian and Cambodian-American Health Statistics, 1994-2021

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Key Findings

- In Cambodia, cardiovascular diseases are the leading causes of death, while in Cambodian-Americans, cancer is the leading cause of death.
- Health habits such as smoking and poor diet and nutrition are associated with the high rates of CVD and various cancers among Cambodians and Cambodian-Americans.
- A large proportion of Cambodians and Cambodian-Americans suffer from mental health issues as a result of trauma experienced during the Khmer Rouge regime.
- Both the Cambodian and Cambodian-American population face limited access to healthcare due to factors including inequitable healthcare distribution and low socioeconomic status.
- The disaggregation of Asian-American health data is necessary to develop a comprehensive understanding of the health issues faced by the Cambodian-American population.

Cambodia is one of the most understudied countries in the world, despite its population of 16.6 million and growing.¹ From 1967-1975, the country entered a period of civil war, followed by the rule of the Khmer Rouge communist party. The Khmer Rouge regime was ultimately responsible for the death of over 2 million Cambodians — 25% of the nation's population at the time — through starvation, disease, and mass executions between 1975-1979.²

The war and genocide resulted in a mass exodus of Cambodian refugees, forced to flee the country and resettle elsewhere. Therefore, largely beginning in the 1970s, a significant Cambodian population was established in the United States — totaling 338,637 Cambodian-Americans today.³

Figure 1: States with the largest Cambodian-American populations, 2010

STATE	POPULATION
California	102,317
Massachusetts	28,424
Washington	22,934
Texas	14,347
Pennsylvania	14,118
Other	94,527

Source: U.S. Census Bureau, 2010 Census SF1, Table PCT7

Due to the lack of published national Cambodian-American health data, much of the Cambodian-American data in this brief has been retrieved from studies conducted in California, Massachusetts, and Washington. These three states are home to over 50% of the total Cambodian American population, as shown in Figure 1 above.

Cardiovascular disease (CVD) and cancer are the leading causes of death among Cambodians and Cambodian-Americans.^{4,5} High rates of CVD and cancer are partially attributable to health habits such as smoking and poor diet.⁶ Additional risk factors include chronic conditions like high cholesterol and hepatitis B.⁷

The top causes of death in Cambodian, Cambodian-American, and American populations vary. Further research is needed to determine what risk factors contribute to these mortality differences.

Cambodians⁵

1. Stroke: 13.3%
2. Cancer: 13.1%
3. Lower respiratory infections: 10.9%
4. Ischemic heart disease: 10.3%
5. Cirrhosis of the liver: 7.5%
6. Tuberculosis: 5.5%
7. Neonatal conditions: 4.0%
8. Diabetes mellitus: 3.3%
9. Chronic Obstructive Pulmonary Disease (COPD): 3.2%
10. Road injury: 2.6%

Source: GBD Compare, Vis Hub 2019

Cambodian-Americans⁴

1. Cancer: 22%
2. Heart disease: 19%
3. Other: 19%
4. Stroke: percentage not available

Source: California Department of Public Health, 2017

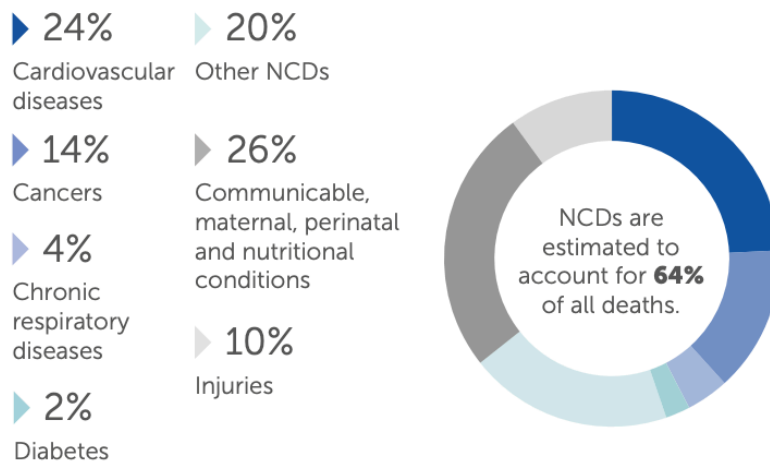
Non-Hispanic White Americans⁸

1. Cancer: 21.1%
2. Ischemic heart disease: 12.9%
3. Chronic lower respiratory diseases: 6.2%
4. Accidents: 5.7%
5. Cerebrovascular diseases: 5.1%
6. Alzheimer’s disease: 4.6%
7. Diabetes mellitus: 2.6%
8. Influenza and pneumonia: 1.7%
9. Suicide: 1.7%
10. Nephritis, nephrotic syndrome, nephrosis: 1.5%

Source: National Vital Statistics Reports. Deaths: Leading Causes, 2019

- It should be noted that there are differences between males and females that are not shown in the rankings provided above.
- Only the top 4 causes of death are available for Cambodian-Americans.

Figure 2: Cambodia Proportional Mortality Rates, 2016



Source: World Health Organization, Non-Communicable Disease Country Profiles: Cambodia

Cardiovascular disease (CVD) accounts for the greatest proportion of deaths among Cambodians and the second greatest proportion of deaths among Cambodian-Americans.

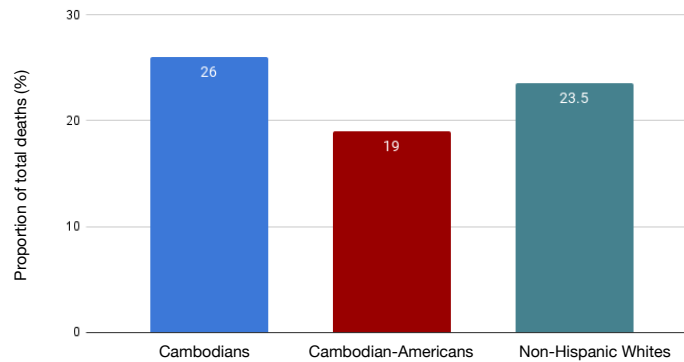
Cambodians

- In Cambodia, CVD accounts for approximately 26% of total deaths and 22% of premature deaths.⁵
- Stroke accounts for 13.6% of non-communicable deaths, while ischemic heart disease accounts for 10.7%.⁵

Cambodian-Americans

- Among Cambodian-Americans, CVD accounts for about 19% of total deaths.⁴
- In 1994, Cambodian-Americans in California had a rate of stroke 4 times that of Non-Hispanic Whites.⁹

Figure 3: CVD Proportional Mortality Rates



Sources: WHO Global Health Estimates: Leading Causes of Death 2019, California Department of Public Health, 2017, National Vital Statistics Reports. Deaths: Leading Causes, 2019

Risk factors including diabetes, high cholesterol and poor nutrition place both Cambodians and Cambodian-Americans at increased risk for CVD.⁶

- 5.9% of Cambodians have diabetes,¹⁰ and 12.3% have been diagnosed with hypertension.¹¹
- Cambodian dishes are typically flavored with fish sauce and monosodium glutamate (MSG), both of which are high in sodium and may contribute to increased rates of hypertension and risk for CVD.^{12,13}
- In 2016, about 1 in 7 Cambodians — 2.4 million individuals — were reportedly undernourished.¹⁴ Malnourishment increases risk of developing CVD, including cardiomyopathy and heart failure.¹⁵
- 5.1%¹⁶ to 27.4%¹⁷ of Cambodian-Americans are reported to have diabetes. No national diabetes data is currently available for this population.
- Reportedly, 24.5% of Cambodian-Americans have high cholesterol. However, less than 50% have ever had their blood cholesterol checked.¹⁶
- Only 16.4% of Cambodian-Americans report eating 5 or more fruits and vegetables daily, as opposed to 32.1% of aggregate Asian Americans and 24.4% of the general US population.¹⁶

Cancer is the leading cause of death among Cambodian-Americans and the second leading cause of death among Cambodians. Both populations are especially affected by cancers of the liver, breast, and lung.

Cambodians

- In Cambodia, cancer accounts for 28.9% of premature deaths from non-communicable diseases.¹⁸ The overall cancer incidence rate is 109.9 per 100,000.¹⁹
- Cancers of the liver (24.7%), lung (14.3%) and colon (9%) comprise the majority of diagnosed cancers among Cambodian men. Cancers of the breast (18.9%), cervix (11.4%) and liver (10.7%) comprise the majority of cancers among Cambodian women.¹⁹

Cambodian-Americans

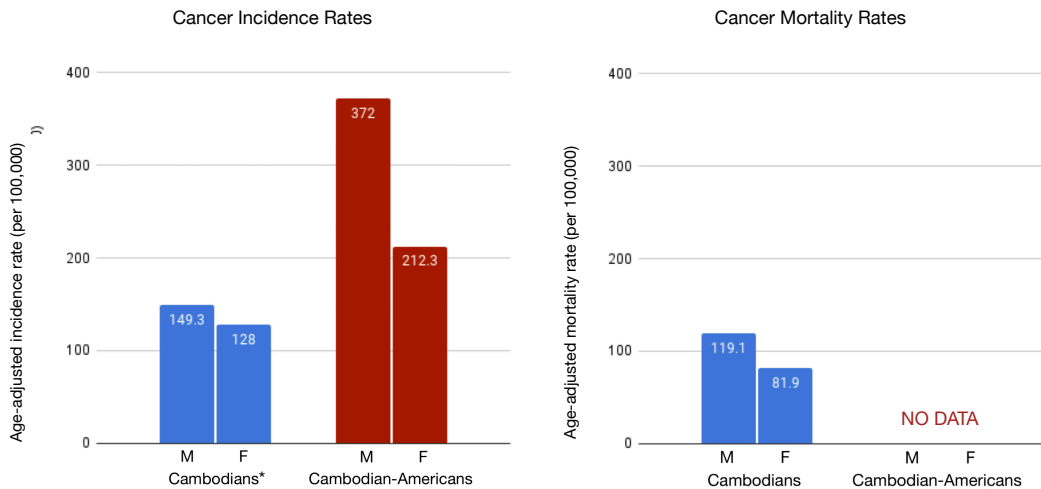
- The overall cancer incidence rate for Cambodian-Americans in California and Washington is 386.3 per 100,000, which is over 3 times the incidence rate in Cambodia.^{19,20}
- Cancers of the colon and rectum, lung, and liver comprise the majority of diagnosed cancers among Cambodian-American men. Cancers of the breast, colon and rectum, and lung comprise the majority of cancers among Cambodian-American women.²¹

Risk factors including smoking habits and hepatitis B infection place both Cambodians and Cambodian-Americans at increased risk for cancer.

- Among Cambodians, 37.4% of males and 6.3% of females smoke.²²
- The prevalence rate of chronic hepatitis B for Cambodians is 4.6%.²³ The infection rate for Cambodians ranges from 5-10%,²⁴ compared to the global infection rate of 3.5%.²⁵

- Among Cambodian-Americans, 50.4% of males and 10.9% of females smoke.¹⁶
- The prevalence rate of chronic hepatitis B for foreign-born Cambodian-Americans is 10.27%.⁷ Cambodian-Americans have a carrier rate 3 times that of the general US population.²⁶

Figure 4: Cancer Incidence and Mortality Rates, 2020



Sources: WHO Cambodia Fact Sheets, 2020, Miller et al., Cancer incidence and mortality patterns, 1998-2002

*Cambodian cancer incidence rates may be underestimated due to lack of diagnosis

A significant proportion of the Cambodian and Cambodian-American populations suffer from some form of PTSD and/or major depression.

Cambodians and Cambodian-Americans have increased mental health needs after surviving more than a decade of war, violence, and genocide in Cambodia between 1967-1979, followed by further traumatizing experiences of rebuilding, refugee camps, and resettlement.^{27, 28}

Cambodians

- In Cambodia, about 40% of the population suffers from mental health and psychological issues.²⁷ An estimated 14% of Cambodians have PTSD.²⁹
- Only 2% of health centers provide out-patient mental health services, and only 2 psychiatric in-patient units are available to service the whole Cambodian population.³⁰

Cambodian-Americans

- Among Cambodian-Americans who were exposed to traumatic experiences prior to immigration, prevalence rates of PTSD and major depression are 62% and 51%, respectively.²⁸
- Within the Cambodian-American population, 42% have been diagnosed with both PTSD and major depression.²⁸

Health disparities experienced by Cambodians and Cambodian-Americans are exacerbated by limited access to healthcare.

- 80% of the Cambodian population lives in rural areas, but 40% of physicians and 74% of specialist physicians are located in the capital city, Phnom Penh.³¹
- In 2012, Cambodia had only 1.4 health workers per 1000 people.³¹
- In Cambodia, only 30% of essential medicines and 60% of essential technologies to treat non-communicable diseases are reported as generally available.³²
- In 2005, 6 in 10 Cambodian women gave birth at home, assisted by unskilled birth attendants.³³ Since then, maternal mortality rates have declined from 472 per 100,000 live births to 160 per 100,000 with increased use of public facilities and private clinics.³⁴

- Over 90% of Cambodian-Americans report worrying about the degree of understanding between themselves and their doctor. 64% report needing a translator.³⁵
- About 2 in 3 Cambodian-Americans speak Khmer. 81% speak a language other than English at home, and 44% have limited English proficiency.³⁶
- 30% of Cambodian-Americans indicate delaying seeking medical attention or purchasing medication due to cost.³⁵ The per capita income for Cambodian-Americans is \$29,648, which is less than Non-Hispanic Whites (\$36,962), aggregate Asian-Americans (\$40,878), and the general US population (\$34,103).^{37,38}
- 15% of Cambodian-Americans are uninsured, which is greater than the general US population (13%) and aggregate Asian American population (12%). 31% of Cambodian-Americans have public health insurance.⁴

Call to Action

Much of the Cambodian-American data in this brief was taken from studies with relatively small sample sizes, conducted only in communities with large Cambodian-American populations (primarily Long Beach, California and Lowell, Massachusetts). It is important to note that this data may therefore not be generalizable to all Cambodian-Americans, yet it remains the only health data publicly available for this population.

Some data which is readily available for other groups, like prevalence rates of diabetes and hypertension, top 10 causes of death, and non-communicable disease mortality rates, are especially unreliable — or simply nonexistent — in the current literature on Cambodian-American health. For example, as noted under “Risk factors including diabetes, high cholesterol and poor nutrition place both Cambodians and Cambodian-Americans at increased risk for CVD,” Cambodian-American diabetes prevalence rates range from 5.1% in Lowell, MA¹⁶ to 27.4% in Long Beach, CA¹⁷ in studies with sample sizes smaller than 1,100 individuals. Publicly accessible cancer incidence rates reflect nearly 20 year old data, and CVD and cancer mortality rates are completely unavailable despite constituting the leading causes of death among Cambodian-Americans.

Cambodian-Americans continue to face unique health challenges which are not well understood in the current literature, an issue largely attributable to the aggregation of Asian-American health data. Although new studies have begun to disaggregate health data to reflect differences between the top 6 subgroups of Asian-Americans (i.e. Chinese, Korean, Japanese, Filipino, South Asian, and Vietnamese), data for all other Asian-American subgroups tend to be aggregated into a single “Other Asian” category. This makes comprehensive health data for these smaller subgroups, including Cambodian-Americans, especially difficult to find. More national research targeting the Cambodian-American population is necessary to address this lack of sufficient and applicable health data.

Summary

This report details statistics on the health behaviors and outcomes of Cambodians and Cambodian-Americans, including health profiles on cardiovascular disease (CVD) and cancers from 1994 to 2021. Exacerbated by high rates of smoking, poor nutrition, and high cholesterol, CVD has become a leading cause of death among Cambodians both in the country of origin and abroad. Cancer has also become a leading cause of death for both populations — particularly cancers of the lung, liver, colon, and breast.

With a population of 338,637, Cambodian-Americans make up one of the smaller, more recently established Asian immigrant groups in the United States. Disaggregated data on Cambodian health is very limited compared to that of larger Asian American groups. Given the lack of complete understanding of the unique health challenges and complications that Cambodians face, especially in the United States, it is imperative that further research be conducted in order to provide this population with culturally relevant and appropriate care.

Definitions

Cancer: A disease in which abnormal cells divide uncontrollably with the potential to invade other parts of the body and destroy body tissue.

Cardiovascular Disease (CVD): A cluster of heart conditions involving narrowed, blocked or diseased blood vessels that can lead to chest pain, blood clots, stroke, or heart attack

Chronic Obstructive Pulmonary Disease (COPD): A chronic disease caused by airflow blockage and breathing-related problems

Death Rate: A measure of the number of deaths among a certain population per unit of time

Diabetes: A disease that results in excess sugar in the blood

Hepatitis B: A chronic liver infection caused by the Hepatitis B virus

Hypertension: Abnormally high blood pressure

Incidence: A measure of the probability of specific medical occurrence in a population during a specific window of time

Ischemic Heart Disease: A disease caused by an interruption in blood supply to the heart

Malignant Neoplasms: A tumor/abnormal growth caused by cancer

Post-Traumatic Stress Disorder (PTSD): A disorder in which a person has difficulty recovering after experiencing or witnessing a terrifying event

Prevalence Rate: A measure of how common a condition is in a certain population

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