

Japanese and Japanese-American Health Statistics, 1965-2021

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Key Findings

- Cancer is responsible for 29% of deaths in Japan. Lung cancer is the leading cause of cancer-related mortality among Japanese. Cardiovascular diseases follow closely behind as the second leading cause of death.
- Hypertension is only treated among 57% of Japan's population, adequately controlled in only 30% of hypertensive patients. Blood pressure levels in Japanese men are higher than those in Japanese living in Hawaii.
- As Japan is one of the world's fastest aging populations, it also seen a rise in aging-associated diseases, such as dementia and diabetes. Japanese-Americans also have higher Alzheimer's mortality rates than other Asian-American subgroups.
- Japan has the highest life expectancy worldwide. Their dietary patterns and traditional health culture are two contributors to Japan's healthy population. However, issues such as tobacco smoking (30% of young men smoke), decreased physical activity, and suicide prevention are still waiting to be tackled.

The Japanese are one of the largest and oldest Asian-American subgroups in the U.S., first settling down in the Hawaiian Islands during 1868 before moving to the U.S. mainland. ¹ Of the six largest Asian-Americans subgroups, Japanese-Americans have the smallest proportion of foreign-born members at 38.8%. ² Thus, the Japanese population presents an excellent opportunity to study the impact of acculturation on health outcomes.

The top 10 causes of deaths in Japanese, mainland Japanese-Americans, Hawaiian Japanese-Americans, and non-Hispanic whites vary. More research must be conducted to determine the risk factors that underlie these differences. ³

Figure 1: Top 5 Causes of Death

Japanese		Mainland Japanese-Americans	
Malignant neoplasms	29%	Malignant neoplasms	26%
Diseases of heart	16%	Diseases of heart	23%
Cerebrovascular diseases	10%	Cerebrovascular diseases	8%
Influenza and pneumonia	9%	Alzheimer disease	5%
Accidents (unintentional injuries)	4%	Diabetes mellitus	3%
Hawaiian Japanese American		Non-Hispanic Whites	
Diseases of heart	23%	Diseases of heart	25%
Malignant neoplasms	20%	Malignant neoplasms	23%
Cerebrovascular diseases	8%	Chronic lower respiratory diseases	6%
Influenza and pneumonia	5%	Cerebrovascular diseases	5%
Alzheimer disease	4%	Accidents (unintentional injuries)	5%

Source: Stanford Center for Asian Health Research and Education, 2021

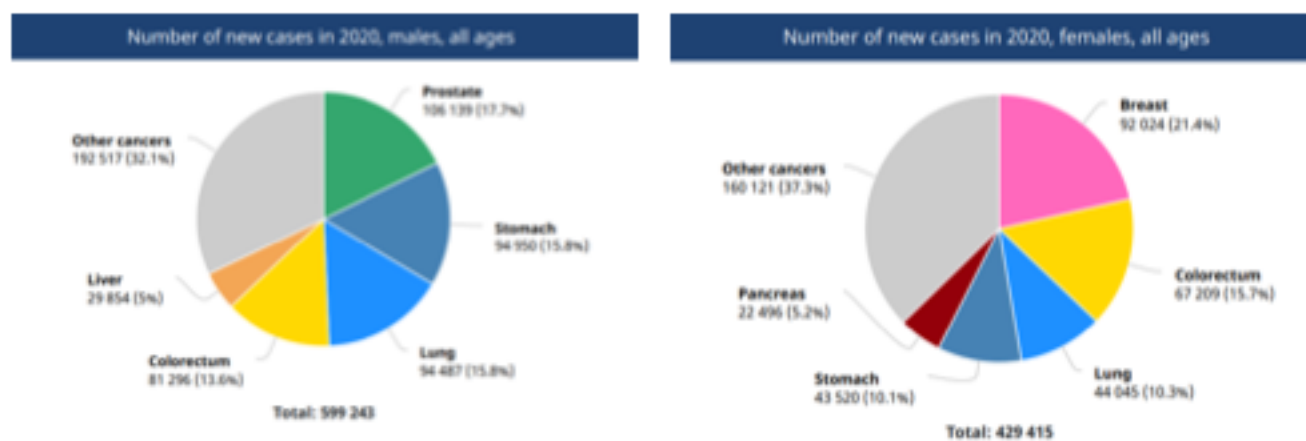
- Cancer and diseases of the heart are the leading causes of death among those of Japanese origin. ²
- Japanese Americans have experienced a higher prevalence of type 2 diabetes than Japanese living in Japan due to westernized lifestyle factors, including consumption of a diet higher in saturated fat and reduced physical activity. ⁴
- Japan's aging population has led to an increase of aging-associated diseases, most notably Alzheimer's and other dementias. ⁵



Cancer is the leading cause of death among those of Japanese origin, but higher in native Japanese than Japanese Americans. ²

- There were 1,028,658 new cancer cases in Japan during 2020, which led to 420,124 deaths. ⁶
- Lung cancer is the leading cause of cancer-related mortality among Japanese, contributing to 19.6% of cancer related mortality for Japanese living in Japan. ⁷ It was also responsible for 23.9% and 21.4% of cancer deaths among Japanese American males and females respectively. ⁸ Smoking and secondhand smoke are the largest risk factors for lung cancer. ⁷
- Stomach cancer, which accounts for 11.0% of Japanese cancer deaths, has seen a declining trend in Japan due to lifestyle modification, such as reduced salt use and increased fresh vegetable and fruit intake. ^{6,9} The decreasing prevalence of *Helicobacter pylori* infection and mass screening efforts have also contributed to this decline. ^{10,11}

Figure 2: New Cancer Cases Profile of Japan



Source: World Health Organization, Globocan 2020: Japan

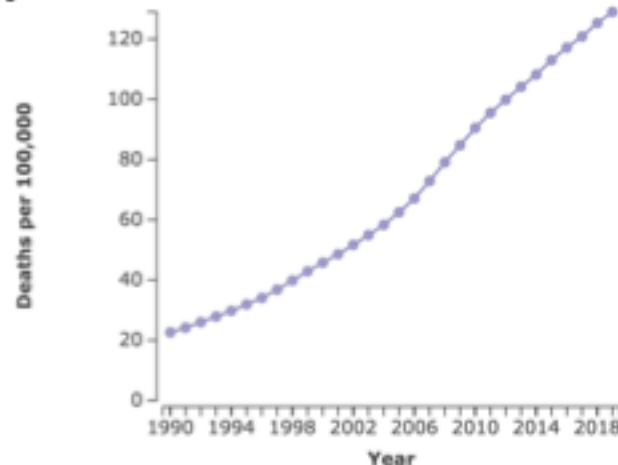
The epidemiology of cardiovascular disease for the Japanese population has been studied extensively, chiefly through the Ni-Hon-San study and the World War II internment experience. ¹²

- Hypertension affects 43 million people in Japan but is only treated in 57% of the population. It is adequately controlled in just 30% of hypertensive patients. ¹³ Despite lower BMI in Japan, blood pressure levels in Japanese men were still higher than those in Japanese living in Hawaii. This may be due to lower treatment rates of hypertension and higher salt consumption in Japan. ¹⁴
- The Ni-Hon-San study revealed differences in CVD rates among Japanese males living in Japan, Hawaii, and California. The prevalence of coronary heart disease was lowest in Japanese males living in Japan and highest in Japanese-American males in San Francisco. The opposite was true for stroke. ¹²
- Internment during World War II contributed to increased cardiovascular disease risk among Japanese. Former internees had twice the risk of cardiovascular disease, cardiovascular mortality, and premature death than their non-interned counterparts. ²⁷ Other longterm health consequences included post-traumatic stress symptoms and decreased life expectancy. ²⁸

With over 28% of the population reported to be aged 65 or over, Japan is one of the world's fastest aging populations and has seen a rise of multiple aging-associated diseases.¹⁵

- Age is the greatest known risk factor for Alzheimer's and other dementias, which have been increasing in Japan for the last 20 years, affecting 15% of individuals aged 65 and over.¹⁶ The Japanese have the highest death rate from Alzheimer's and other dementias at 129.02 deaths per 100,000, contributing to 11.78% of total deaths.¹⁷ It is important to note, however, that these rates may be higher than observed in other population due to survival bias and lack of competing mortality risks.¹⁸
- Diabetes prevalence in Japan is also expected to substantially increase during the next decade, and will affect over 9.8% of the population (9.7 million people) in 2030.¹⁹ This increase is mainly a result of population aging and a steady increase in body mass index and cholesterol levels, credited to more fat intake and a sedentary lifestyle.²⁰
- Despite Japan's elderly population, influenza and pneumonia mortality declined for Japanese living in Japan. Age-adjusted mortality rates also decreased for Japanese-Americans living in the U.S. mainland, but increased for Japanese-Americans living in Hawaii.³

Figure 3: Death Rate from Alzheimer's and other Dementias in Japan



Source: GBD Compare 2019, Japan

Japan has achieved the longest life expectancy at birth worldwide at 81.41 years for men and 87.45 years for women. Understanding what has contributed to its healthy population is important for global health policy.^{21 22}

- The Japanese pay special attention to personal hygiene and have high levels of health concern. Japan has extensive health check-ups and screenings, aiming to detect disease and disease risk as early as possible.²¹ Japanese dietary patterns are characterized by low intake of red meat and high intakes of fish, plant foods, and non-sugar-sweetened beverages, such as green tea.²³ They also consume less calorie and animal fat than in Western diets.²⁴
- The largest Japanese diasporas, including those in Brazil (2 million) and in the U.S. (1.5 million), do not enjoy the same health outcomes.^{25 26} Due to genetic similarities among these immigrant populations, their health outcomes and mortality data can be compared to understand disparities in these diaspora populations, as well as develop adequate public health policy and improve health outcomes for immigrants worldwide.

Summary

Cancer and diseases of the heart are among the leading reasons for Japanese fatalities. As Japan continues to age, aging-associated diseases, including Alzheimer's and diabetes, should be studied to develop possible solutions for the global elderly. Healthy lifestyle habits that contribute to Japan's high life expectancy should also be studied as positive outliers.

Many research efforts have been made to compare the incidences of lifestyle-related diseases and mortality between native Japanese living in Japan and Japanese Americans, demonstrating the significance of lifestyle factors rather than genetic background when determining disease risk. Additional research should be done in areas such as mental health and health outcomes for Japanese diasporas and second-generation Japanese Americans.

Definitions

Alzheimer's Disease: The most common cause of dementia, a general term for memory loss and other cognitive abilities serious enough to interfere with daily life.

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

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

Hypertension: Abnormally high blood pressure

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

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

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

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Special thanks to Chloe Sales for the formatting of this report.

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