



SANTA BARBARA COUNTY LEADING CAUSES OF DEATH 2018-2020

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Santa Barbara County

PUBLIC

Health



D E P A R T M E N T

EXECUTIVE SUMMARY

Cause of death information is vital to the development of health policies and programs for prevention and control of disease and injury. Current death reporting is essential for public health planning and healthcare allocation. When looking across all races/ethnicities, during the most recent three-year period of which data is available (2018-2020), the mortality rate for Santa Barbara County (SBC) residents was 8% below the California rate.

The **Santa Barbara County Leading Causes of Death Report, 2018-2020** summarizes rate differences across key demographics of residents in Santa Barbara County.

1. Cancer, Heart Disease and Unintentional Injuries were the leading cause of death when adjusted for age. All three causes impacted males at a much higher rate than females;
 - The rate was 39% higher in males than females for cancer
 - The rate was 26% higher in males than females for heart disease
 - The rate was 63% higher in males than females for unintentional injuries
2. Although number of deaths has been on the rise each year since 2010, when adjusted for age, the Santa Barbara County death rate has been on the decline since 2010 and has been consistently below California's rate.
3. When comparing across race/ethnicity, in 2018-2020 there were statistically significant decreases in death rates of Asian/Pacific Islanders, Multiracial, and Hispanic residents compared to the previous 3-year rates, and increases in rates in the White non-Hispanic population.
 - The Hispanic rate saw the steepest decline: a 40% decrease from the previous rate.
 - The White non-Hispanic rate increased by approximately 46% from the previous rate.
 - In 2018-2020, the highest death rate, which was seen in the White non-Hispanic population (899.5 deaths per 100,000 population), was nearly 3-times higher than the Hispanic death rate (291.9).
 - The Hispanic death rate was the second lowest death rate behind the Multiracial population death rate at 157.6 in 2018-2020.

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4. Regionally, South County consistently had death rates about 25% lower than other regions.
 - Central and North County have had similar death rates over the years covered in this report.
5. With one complete year (2020) of COVID-19 death data available, a separate section of this report draws attention to the impact of COVID-19 on the mortality of SBC residents.
 - The overall age-adjusted rate of 30.5 deaths per 100,000 falls just below the 3-year death rate for strokes, the 5th leading cause of death in SBC. When 3-years' worth of COVID-19 mortality data is available, the top ten causes of death will likely include COVID-19.
 - Both male and White Non-Hispanic residents experienced higher COVID-19 death rates compared to their counterparts.
 - The North County region was most impacted by COVID-19 related deaths; The North County rate was approximately 4.5-times higher than the rate of South County, and almost 2.5 times higher than the Central County rate.

What is an Age-Adjusted Death Rate?

An age-adjusted death rate is a death rate that takes into account the effects of differences in age distributions across populations. A county with a larger older population will most likely see an increase in the number of deaths due to chronic illnesses such as cancers and heart disease, while counties with a larger proportion of younger residents will tend to see a larger percentage of unintentional injuries. A 'standard' population distribution is used to adjust local death rates controlling for age differences and allows the adjusted death rates to be comparable across different geographies with different age distributions.

*Unless otherwise mentioned, the term 'death rate' referenced in this report assumes age-adjusted death rate per 100,000 population.

Leading Causes of Death, 2018-2020

In Santa Barbara County between 2018-2020 there were approximately 3,286 resident deaths per year in a county of nearly 450,000 residents (0.7%). When adjusting for age, the leading causes of death among Santa Barbara County residents were cancer (malignant neoplasms), heart disease, and unintentional injuries. Sharp contrasts in death rates were seen across gender.

	Cause		Age-Adjusted Rate		
Rank		N	Total	Female	Male
	All Causes	9857	576.2	486.0	676.8
1	Cancer	2062	125.7	113.0	142.6
2	Heart Disease	2196	123.0	95.2	155.3
3	Unintentional Injuries	567	39.1	21.8	56.2
4	Alzheimer's Disease	729	37.0	40.7	31.4
5	Stroke	617	33.7	33.6	33.1
6	Chronic Lower Respiratory Disease	435	24.3	23.8	24.9
7	Diabetes mellitus	260	15.8	12.3	20.2
8	Liver Disease	188	13.0	9.1	17.0
9	Suicide	161	11.2	7.1	15.5
10	Influenza	171	9.5	7.8	11.4

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- Although in 2020 the number of deaths increased 0.8% from the previous year (Figure 1), when averaged and adjusted for age, the County death rate had been stable with statistically insignificant fluctuation since 2010 (Figure 2).

Figure 1: All Deaths, SBC

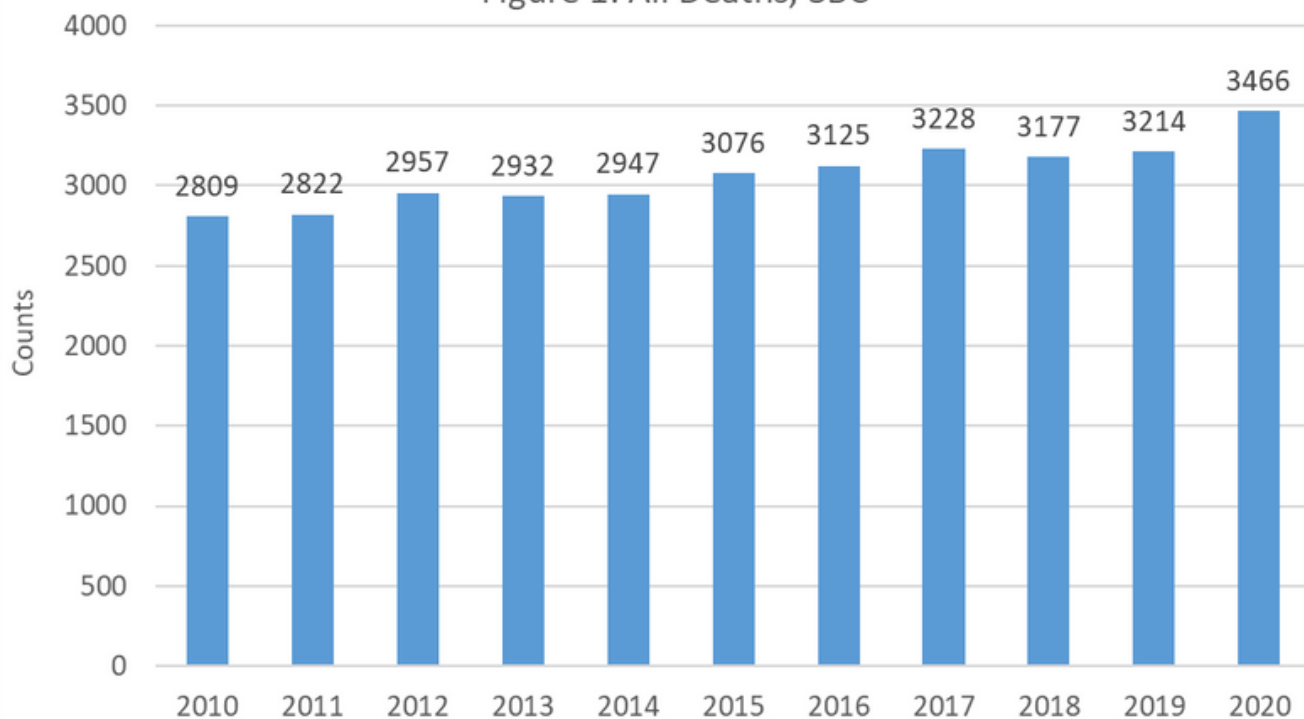
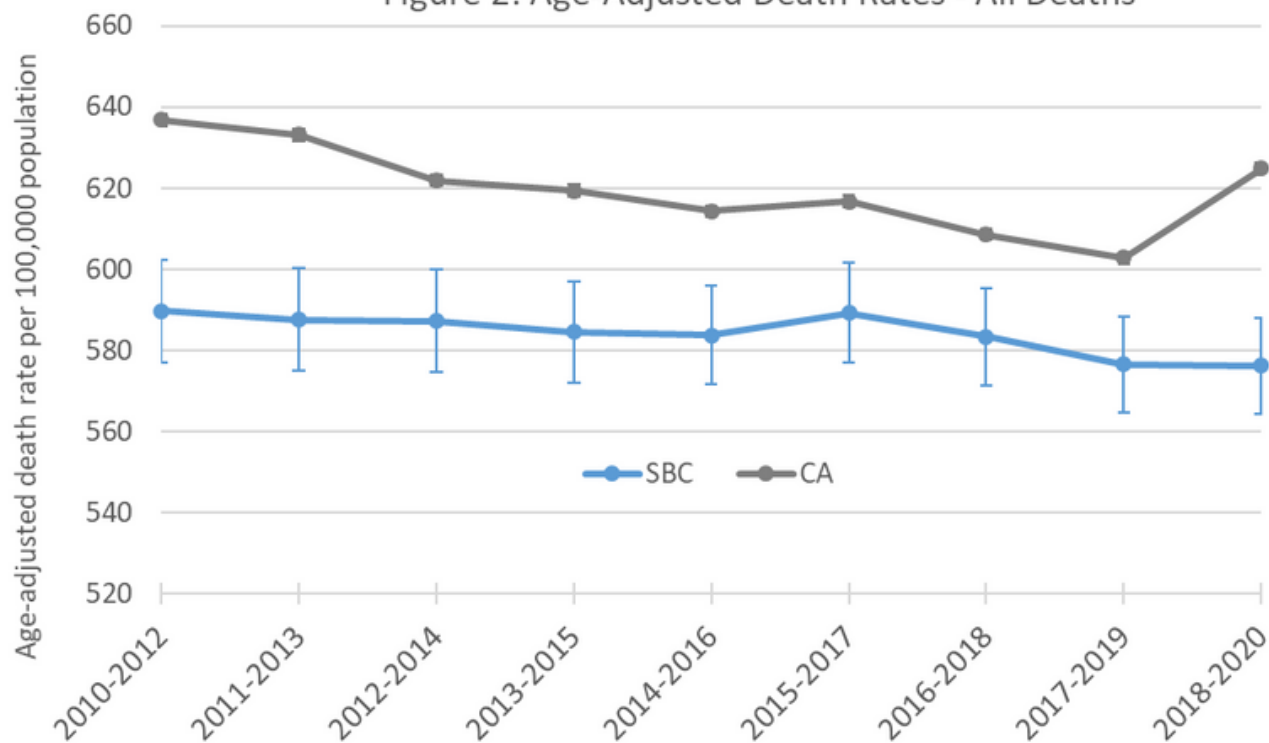


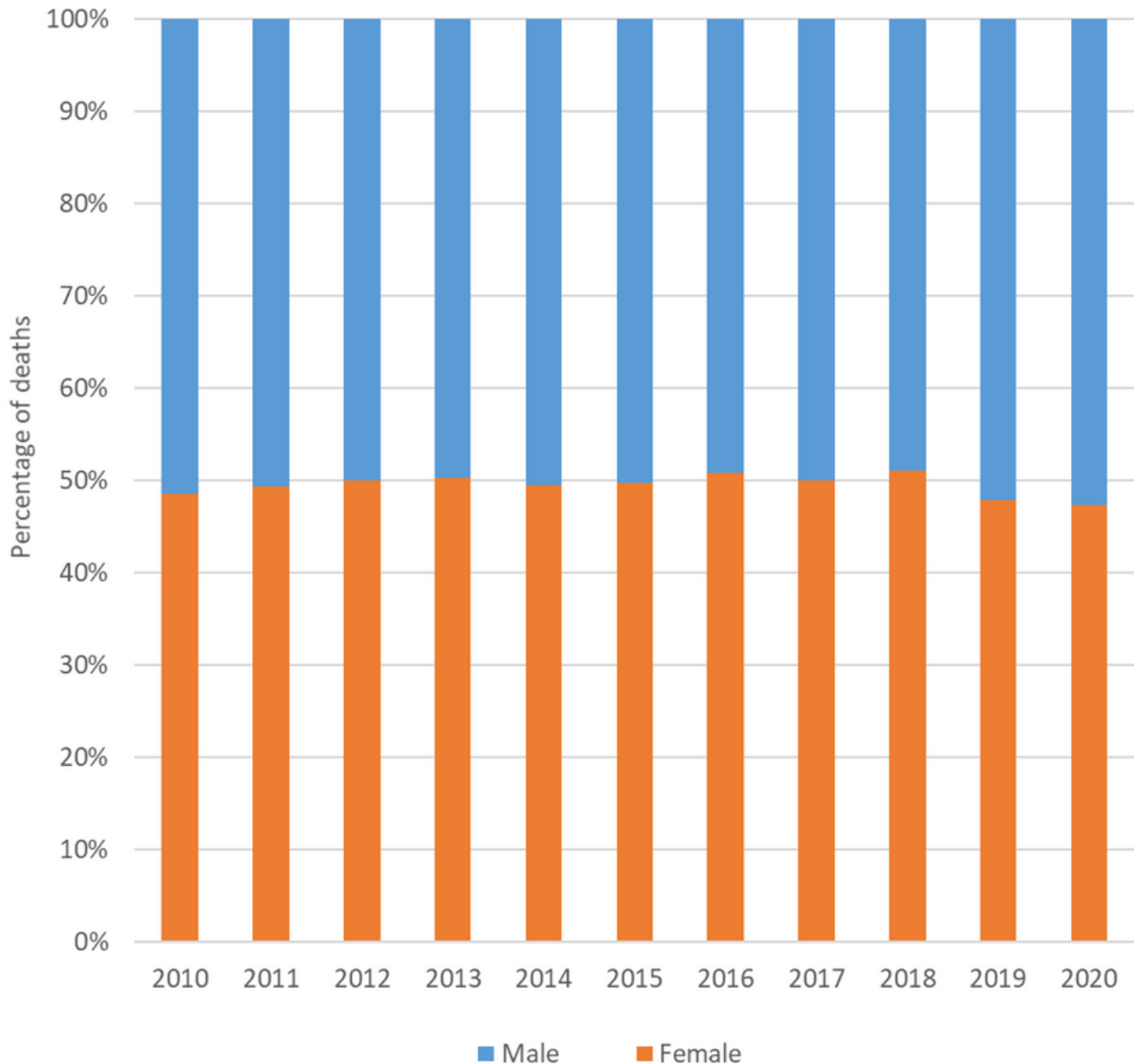
Figure 2: Age-Adjusted Death Rates - All Deaths



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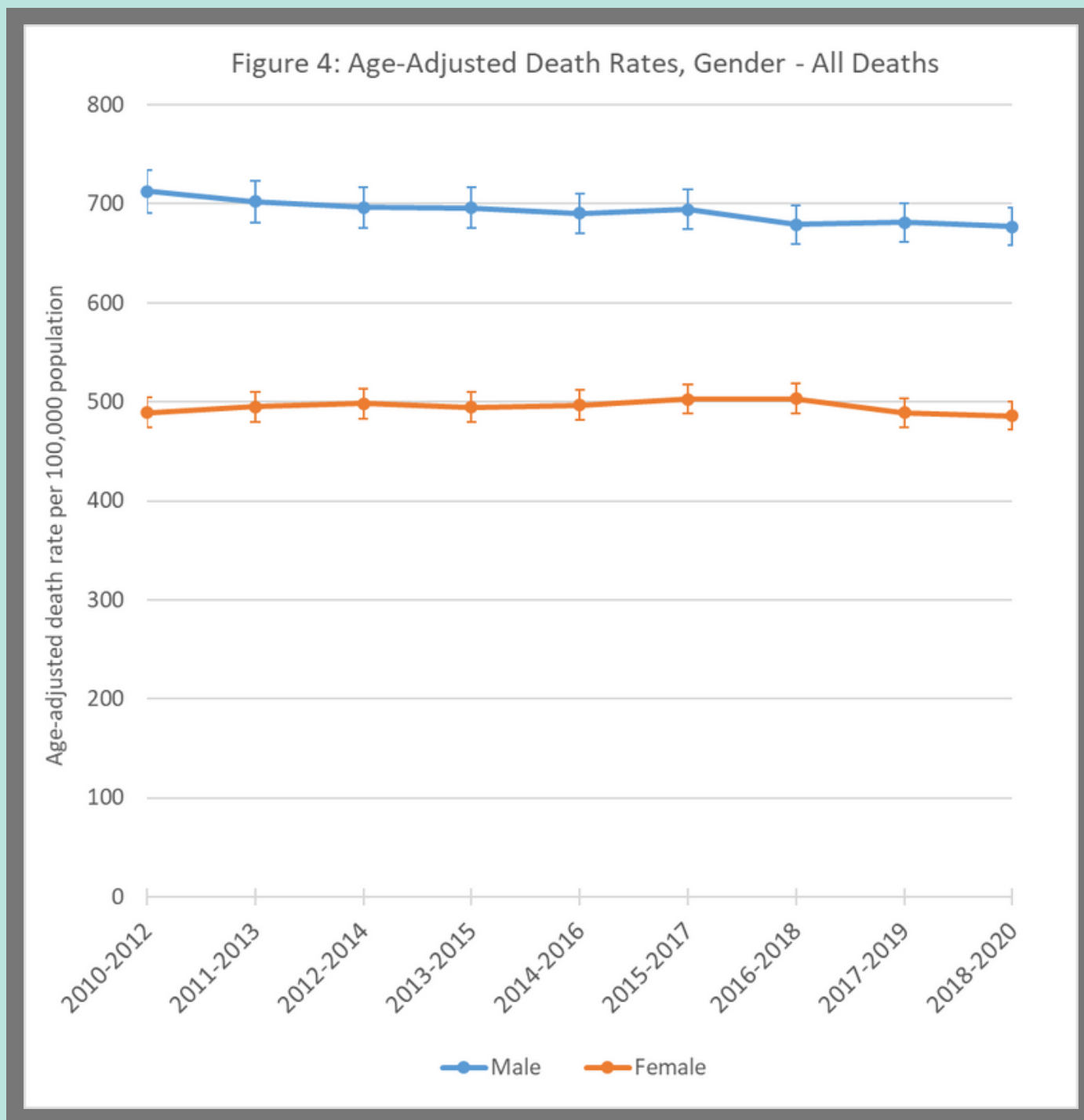
- The 2018-2020 Santa Barbara County age-adjusted death rate, 576.2 (95% C.I. = 564.5 - 587.9), was substantially less than the California age-adjusted death rate, 624.8 (95% C.I. = 623.4 - 626.1) (Figure 2).
- In recent years, the proportion of female deaths dipped below 50% of all deaths (Figure 3).

Figure 3: All Deaths by Gender, SBC



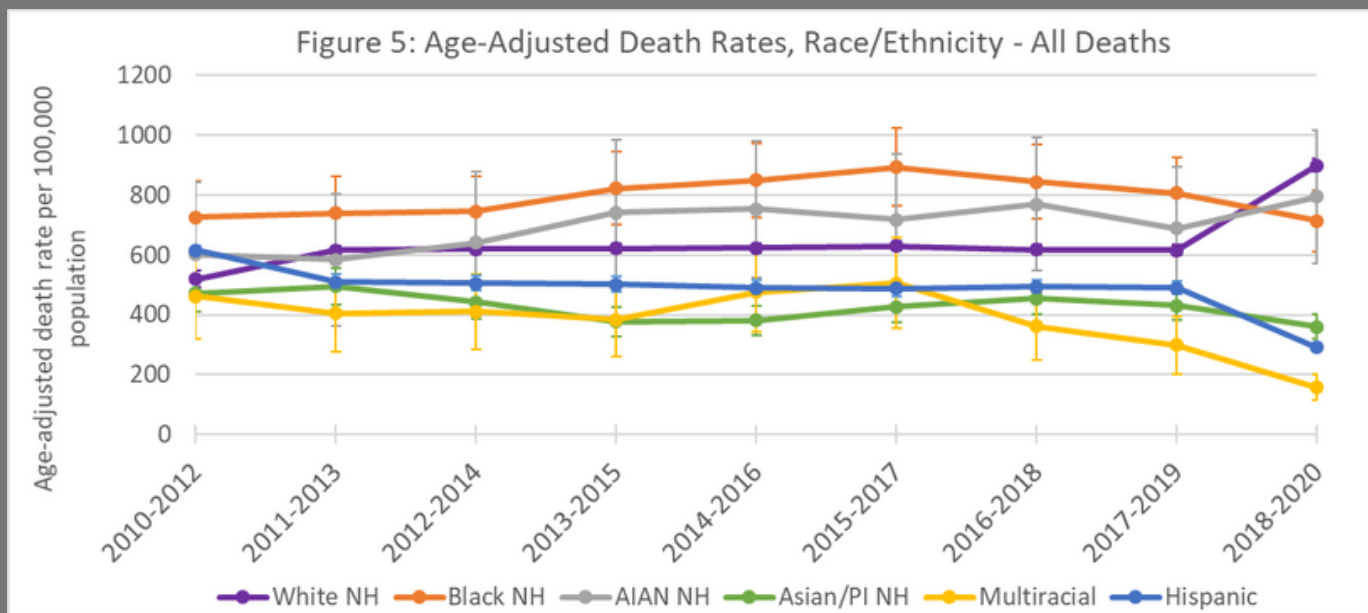
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- Death rates in the female population had been consistently lower than male death rates as seen in Figure 4. Male death rates were about 40% higher than female death rates in 2018-2020 (486 vs 677).
- 2017-2019 and 2018-2020 saw declines in death rates in both genders.



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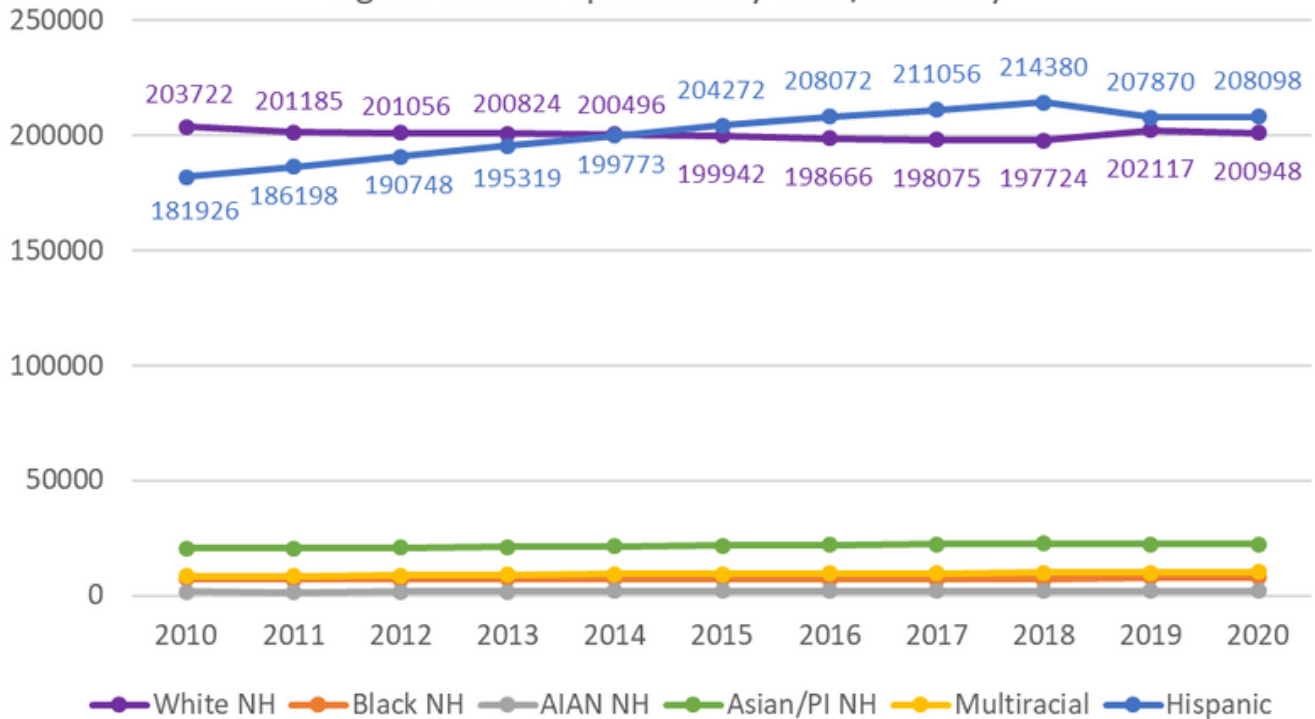
- In 2018-2020, there were significant decreases in the death rates of Asian/Pacific Islanders, Multiracial, and Hispanic residents compared to the previous 3-year rates (Figure 5).
- There was no singular explanation for the decrease in the Hispanic rate, but decreased deaths were seen across several causes of death (unintentional injury, suicide, stroke, liver diseases) in 2018 and/or 2019.
- In that same time period, there was a substantial increase (45.6%) in the White non-Hispanic death rates (616.6 in 2017-2019 vs 899.5 in 2018-2020).
- Black SBC residents have historically had the highest death rates in SBC and comprise about 2% of the County's population. This mortality disparity is a result of social determinants of health caused by centuries of racism and discrimination.
- Increases and decreases not highlighted were not statistically significant given the overlapping confidence intervals between the 2017-2019 and 2018-2020 rates, e.g. American Indian Alaskan Native (AIAN) residents rate and the Black Non-Hispanic residents rate.



- To further explain the large increases and decreases seen in 2018-2020, race/ethnicity population estimates from the California Department of Finance were reviewed. In 2019, the decrease in the Hispanic population and the increase in the White non-Hispanic population (Figure 6 on the following page) resulted in the corresponding age-adjusted rates to shift more dramatically in those respective directions.
- If the Hispanic and the White non-Hispanic populations continue to stabilize as seen in 2019 and 2020, dramatic differences in death rates will hopefully subside.

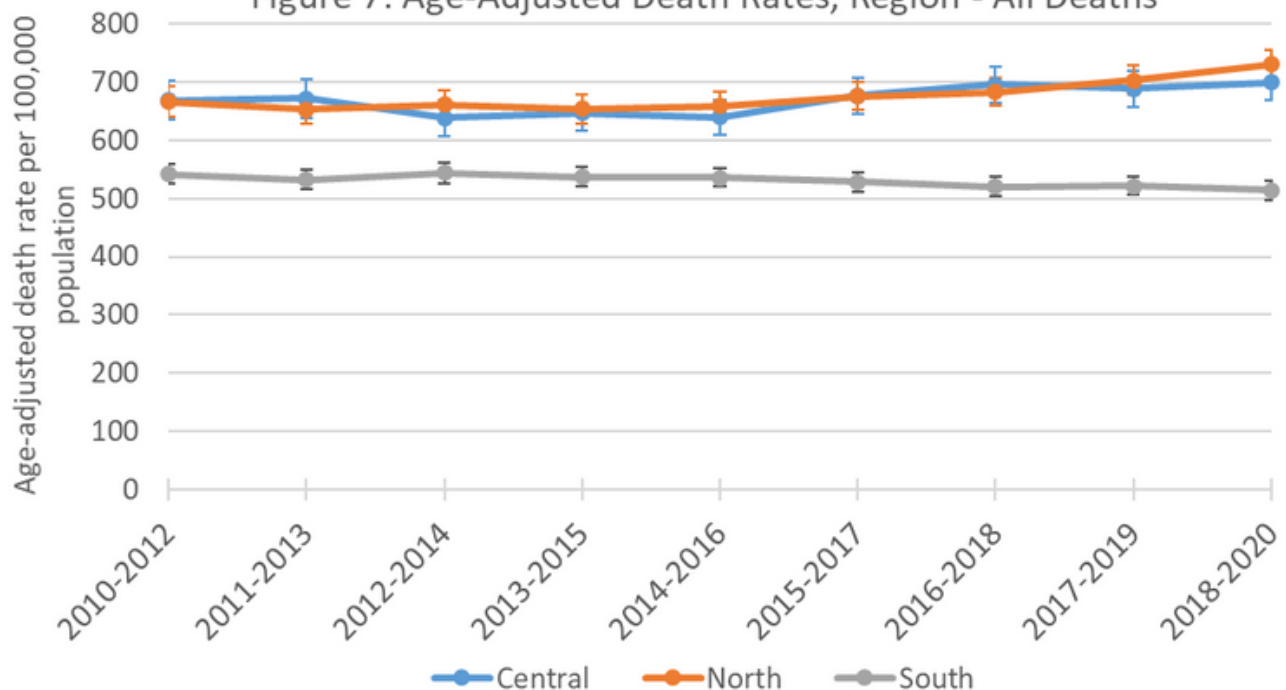
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Figure 6: SBC Population by Race/Ethnicity



- Regionally, South County consistently had death rates about 25% lower than other regions, as depicted in Figure 7.
- Central and North County had similar death rates over the years given overlapping confidence intervals of calculated death rates.

Figure 7: Age-Adjusted Death Rates, Region - All Deaths



COVID-19-Related Deaths, 2020

In 2020, the global pandemic of COVID-19 reached Santa Barbara County and impacted death counts and rates in that year. Because COVID-19 data was only available for one year, the data stands alone rather than being presented with other causes of death rates averaged over 3 years. The 2020 COVID-19 death rate was 30.5 deaths per 100,000 population which would rank just below the 2018-2020 stroke death rate of 33.7, seen in the first table of this report. The impact of COVID-19 on death rates in 2021 is expected to increase.

Reviewing the table below, both male and Non-Hispanic White residents experienced higher COVID-19 death rates compared to their counterparts. Regionally, the North County was impacted most.

COVID-19		2020				
		N	Crude Rate	Age-Adjusted Rate	Low CI	Up CI
Total		174	38.6	30.5	25.8	35.2
Sex						
Female		80	35.9	24.6	19.0	30.1
Male		94	41.1	37.1	29.5	44.7
Race/Ethnicity						
White NH		66	66.5	57	43.1	70.8
Hispanic		93	43.8	36.8	29.1	44.6
Asian/PI NH		8				
Additional Races*		7				
Age						
0-44		10	3.5			
45-64		26	27.5			
65-84		84	136.1			
85+		54	467.0			
Region						
Central		27	33.1	28.5	17.6	39.5
North		99	65.0	68.1	54.4	81.7
South		47	22.2	15.1	10.6	19.5

*Additional Races includes Black, AIAN non-Hispanic, Multiracial, and Unknown race

In the table above, Low CI and Up CI are the Lower and Upper 95% confidence intervals for the age-adjusted rates.

FUTURE REPORTS

Trends across demographics for specific causes of deaths will be reported in the summer of 2022 on the Epidemiology [webpage](#).

TECHNICAL NOTES

Death data was obtained from the California Vital Records BI System (VRBIS). Santa Barbara County deaths are based on residence of the decedent regardless of place of death.

Final cause of death and ICD-10 code is assigned to each record within VRBIS.

ICD-10 codes of deaths

Alzheimer's Disease: G30

Cancer: C00-C97

Chronic Lower Respiratory Disease: J40-J47

COVID-19: U07.1

Diabetes: E10-E14

Drug Overdoses: X40-X44, X60-X64, X85, Y10-Y14

Firearm-Related: U01.4, Y35.0, W32-W34, X72-X74, X93-X95, Y22-Y24

Heart Disease: I00-I09, I11, I20-I51

Influenza: J10-J18

Liver Disease: K70, K73-K74

Stroke: I60-I69

Suicide/Self-harm: U03, X60-X84, Y87.0

Unintentional Injuries: V01-X59, Y85-Y86

Santa Barbara County Geographic Regions

Central: 93436-93438, 93460, 93463, 93464, 93427, 93440, 93441

North: 93434, 93214, 93254, 93429, 93454-93458

South: 93101-93111, 93116-93118, 93067, 93013, 93014, 93114, 93120, 93121, 93130, 93140, 93150, 93160, 93190, 93199

Santa Barbara County Population Estimates

California Department of Finance. Demographic Research Unit. Report P-3: Population Projections, California, 2010-2060 (Baseline 2019 Population Projections; Vintage 2020 Release). Sacramento: California. July 2021.

95% Confidence Interval (C.I.) mentioned with the age-adjusted death rates is a range of values that is likely to include the rate with a 95 degree of confidence.

For More Information Visit
Santa Barbara County Public Health Epidemiology Unit
<https://www.countyofsb.org/1585/Epidemiology>