HEALTH STATUS ASSESSMENT 2020



August 9, 2023 SACRAMENTO COUNTY PUBLIC HEALTH



Health Status Assessment 2020

Sacramento County residents

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DEMOGRAPHICS AND SOCIAL DETERMINANTS

Population Demographics

FIGURE 1: Current and 10-year projected County populations by race/ethnicity, 2020 vs. 2029¹



FIGURE 2: Population age-sex pyramid, 2020¹



Source: 1. California Department of Finance P-2 County Population Projections 2010-2060

POPULATION DEMOGRAPHICS

Projections and race/ ethnicity:

There was a total of 1,562,242 residents in the County in 2020 [Figure 1]. Whites were the largest group (46.4%), followed by Hispanics (23.1%), Asian/Pacific Islanders (15.4%), Blacks (10.0%), Multi-race (4.6%), and then American Indian/Alaskan Natives (0.6%). The County population is projected to increase by 7.1% to 1,673,203 over the next ten years. Multi-race is projected to have the largest percent increase by 2029 (+15.9%). Whites are projected to have the smallest percent increase (+4.3%) but will still remain the largest single racial/ethnic group in the County in 2029.

Age and sex: The County population pyramid [Figure 2] is stationary, meaning that the percentages of age and sex have remained generally constant over time. Stationary populations occur when there is a balance between birth, death and migration rates. Population decreases are observed in males at a slightly younger age compared to females. The somewhat larger 20 to 24 age group categories may be partially attributable to the several local colleges and universities in the County.

Nativity and Language

FIGURE 3: County population by nativity, 2020¹



*Includes lawful permanent residents, certain legal non-immigrants (e.g., student or work visas), those admitted under refugee asylee status, and persons illegally residing in the United States.

FIGURE 4: Foreign-born by world region of birth, County vs. State, 2020¹



TABLE 1: Languages spoken at home (age >5), County vs. State, 2020¹

Language	County	State
English only	67.6%	56.1%
Spanish	13.3%	28.3%
Asian/PI language	9.9%	10.0%
Other Indo-European languages	8.2%	4.5%

NATIVITY AND LANGUAGE

Nativity: Nearly 80% of persons residing in Sacramento County were U.S. Natives and about onefifth were persons who were not U.S. citizens at birth [Figure 3]. The largest proportion of foreignborn persons residing in the County were born in Asia, followed by Latin America and then Europe [Figure 4]. The County has a larger proportion of foreign-born residents who were born in Asia or Europe and fewer who were born in Latin America compared to the State overall.

Language: More than two-thirds of persons age five and older in the County spoke only English at home compared to more than half of households in the State [Table 1]. Compared to the State, there was a similar proportion of persons who spoke Asian/Pacific Islander languages, fewer who spoke Spanish, and more who spoke other Indo-European languages.

Source: 1. 2020 American Community Survey 5-year estimates

Economic Characteristics



Median household income¹: **\$70,672** Compared to State: *\$78,672*

Receiving CalFresh benefits¹: **11.3%** Compared to State: 9.0%

Median student loan debt²: \$18,245 Compared to State: \$18,500

Unemployment $(age \ge 16)^1$: 6.2% Compared to State: 6.4%

FIGURE 5: Poverty rate by census tract, 2020



Sources: 1. 2020 American Community Survey 5-year estimates, 2. Urban Institute Debt in America: <u>https://apps.urban.org</u> accessed July 2022

ECONOMIC CHARACTERISTICS

Economic characteristics are key determinants of health. Greater income is associated with lower likelihood of disease and premature death, according to the National Center for Health Statistics.

Snapshot: The median household income in the County was just over \$70,000 with the medium per capita income at \$37,259. The County had a lower median household income, but lower unemployment rate compared to the State. A larger proportion of County residents received CalFresh benefits compared to the State. The median student loan debt was over \$18,000 for both the County and State.

Poverty: The overall adult (age 18+) poverty rate for the County was 12.1% and the overall child (age <18) poverty rate was 16.9% in 2020. Poverty rates varied geographically within the County [Figure 5]. The areas of highest poverty were similar to those with lower high school graduation rates, more single-parent households, and higher unemployment.

Housing and Built Environment

Owner occupied¹: **57.4.%** Compared to State: 55.3%



Median housing cost¹: **\$1,438** Compared to State: \$1,688

Long commute, driving alone²: 40% Compared to State: 42%

Food insecurity rate⁴: **11.7%** *Compared to State: 9.1%*

FIGURE 6: Walkability scores by city³



FIGURE 7: Sheltered and unsheltered homeless population point-in-time counts 2013-2019³



Sources: 1. 2020 American Community Survey 5-year estimates, 2. 2022 California Health Rankings (used years 2016-2020 data), 3.WalkScore, 4. Sacramento Steps Forward homeless point in time counts

HOUSING AND BUILT ENVIRONMENT

Accessible, quality and affordable housing is an essential social determinant of health. Built environment design (infrastructure, transportation, land use, etc.) can help mitigate climate change, influence lifestyles and improve public health.

Snapshot: Over half of homes in Sacramento County were owneroccupied in 2020. The medium housing cost was over \$1,400 in the County. County residents were more likely than the State overall to commute alone and longer than 30 minutes to work.

Walkability: All major cities in Sacramento County were cardependent (walk score <50) in 2020 [Figure 6]. The city of Sacramento was the most walkable city in the County whereas Folsom was the least walkable.

Homelessness: There was an estimated total of 5,570 persons experiencing homelessness in the County in 2019, 70% of whom were unsheltered [Figure 7]. The number of sheltered individuals remained relatively steady since 2013, but the number of unsheltered individuals increased nearly 396.2% from 2013 to 2019.

Educational Attainment



High school diploma (age ≥25): 87.9% Compared to State: 83.9%

Bachelor's degree or higher: **31.4%** Compared to State: 34.7%

4-year cohort graduation rate: 80.6% Compared to State: 83.6%

Chronic absenteeism rate²: **16.4%** *Compared to State: 14.3%*

FIGURE 8: Racial/ethnic disparities in suspension rates²



FIGURE 9: Percent meeting English language Arts, mathematics, and science achievement standards by sex, California



Sources: 1. 2020 American Community Survey 5-year estimates, 2. National Center for Education Statistics 2016-2017 academic year 3. California Department of Education DataQuest 2016-2017 academic year 4. California Department of Education California Assessment of Student Performance and Progress 2017

E D U C A T I O N A L A T T A I N M E N T

Education can create opportunities for better health. Applicants with more education are more likely to get higher paying jobs with benefits such as health insurance, and therefore have access to more health resources.

Snapshot: Most County residents (age ≥25) had a high school diploma or higher and over 30% had a bachelor's degree or higher in 2020. The County four-year cohort graduation rate was slightly lower than the State in the 2020-21 school year. Chronic absenteeism was higher in the County compared to the State in the 2020-21, and much higher than previous years, likely due to the COVID-19 pandemic.

Disparities in discipline:

Black students were more likely than their non-Black peers to be suspended or expelled from school in 2020-21 [Figure 8].

Academic Achievement: Less than half of California students were meeting achievement standards in the 2020-21 school year with the exception of females in English Language Arts [Figure 9]. Due to the COVID-19 pandemic, testing participation varied and there was not enough participation to display Countyspecific results. **Crime & Safety**

Violent crime rate¹: 468.2 (per 100,000) Compared to State: 439.9 Compared to State: 2,128.5

Property crime rate¹: 2,101.0 (per 100,000)

Total Felony Arrests^{1:} 12,115

Sworn law enforcement¹ officers: 2,378 (Excludes CA Highway Patrol)

FIGURE 10: Trend in number of domestic violence calls for assistance¹



FIGURE 11: Reported hate crimes by major bias type 2011-2020¹



Source: 1. California Department of Justice 2020 OPENJUSTICE data

CRIME AND SAFETY

Crime and safety affect communities and is a key social determinant of health. Crime can cause both physical injury and mental health conditions such as depression and post-traumatic stress disorder.

Snapshot: The County violent crime rate was slightly higher than the State overall, but the property crime rate was lower. There were over 12,000 felony arrests in the County in 2020, including 4,792 violent offenses, 1,110 drug offenses and 183 sex offenses.

Domestic Violence (DV): There was an overall decrease in the number of DV-related calls for assistance from 2011 to 2020, but 2020 had a slight uptick in DV calls [Figure 10]. Data should be interpreted with caution as DV is generally underreported, and many social and cultural factors can influence reporting likelihood.

Hate crimes: The number of reported hate crimes in the County decreased from 35 in 2011 to 22 in 2020 [Figure 12]. Of the 257 hate crimes during the ten-year period, over half were bias based on race/ethnicity or ancestry and more than one quarter were bias based on sexual orientation. Anti-Black was the most common racial bias and anti-Jewish was the most common religion bias.

INFECTIOUS DISEASE

COVID-19

COVID-19 is a disease caused by a novel strain of coronavirus (SARS-CoV-2) first identified in an outbreak in Wuhan, China in December 2019. On March 11, 2020, the World Health Organization declared COVID-19 a global pandemic. Efforts to contain COVID-19 were unsuccessful. The pandemic had sweeping medical, social, and economic impacts locally and worldwide. COVID-19 is mainly transmitted through close proximity to an infected individual. Symptoms typically appear 2 to 14 days after infection and include fever, chills, coughing, shortness of breath, headache, muscle aches, vomiting or diarrhea, and loss of taste or smell. Cases can range from showing no symptoms to severe illness requiring hospitalization or even death.



FIGURE 13: COVID-19 rates per 100,000 by month, County vs. State, 2020¹



Source: 1. California Reportable Disease Information Exchange (CalREDIE); 2. California Department of Public Health

COVID-19

Cases by month: There were a total of 69,830 COVID-19 cases in the County in 2020. COVID-19 case counts drastically increased during 2020 [Figure 12]. The initial increase in cases in March 2020 resulted in Statewide stay-a-home public health orders as health response efforts shifted from disease containment to mitigation efforts. Cases surged in July of 2020. There was a 'second wave' again in December 2020 driven by the Delta variant.

Rates by month: County COVID-19 rates follow a similar monthly trend as cases [Figure 13]. The surge in case rates in December were greater in the State overall compared to the County.

FIGURE 14: COVID-19 deaths by month, 2020¹



FIGURE 15: COVID-19 death rates per 100,000 by month, County vs. State^{1, 2}



Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.





Source: 1. California Reportable Disease Information Exchange (CalREDIE); 2. California Department of Public Health

C O V I D - 1 9

Deaths by month: There were a total of 1,176 COVID-19 deaths in the County in 2020. COVID-19 deaths by month in the County in 2020 followed a similar pattern as cases during 2020 [Figure 14]. During the July surge, 175 County residents passed away. The Delta surge in December was more than twice as deadly as the surge in July.

Rates by month: County COVID-19 death rates follow a similar monthly trend as number of deaths [Figure 15]. Similar to case rates, the surge in death rates in December was greater in the State overall compared to the County.

Age: COVID-19 infections affected all ages in 2020 [Figure 16]. Nearly half of all COVID-19 cases were among persons age 30 to 59. The vast majority of COVID-19 deaths were among adults age 60 and older, despite representing the lowest number of infections.

FIGURE 17: COVID-19 cases and deaths by sex¹



FIGURE 18: COVID-19 case rates per 100,000 by race/ethnicity¹



FIGURE 19: COVID-19 death rates per 100,000 by race/ethnicity¹



Source: 1. California Reportable Disease Information Exchange (CalREDIE)

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C O V I D - 1 9

Sex: A slight majority of COVID-19 infections occurred among females in 2020 [Figure 17]. However, there were slightly more COVID-19 deaths among males.

Cases rates by race/ethnicity:

COVID-19 case rates varied by race/ethnicity in the County [Figure 18]. Native Hawaiian and Other Pacific Islanders (NHPI), followed by Hispanics had the highest COVID-19 case rates in the County in 2020. Whites had the lowest case rates.

Death rates by race/ethnicity:

NHPIs also had the highest COVID-19 death rates compared to all other racial/ethnic groups in County in 2020. Despite having the lowest case rates, Whites had the second highest death rates. Hispanics had the lowest death rates, despite relatively high case rates.

TABLE	2. Vuo	distribution		hospitaliza	tions
IADLE	z: Age	aistribution	01 COAID-13	nospitaliza	lions

Age group	Number (percent)
Age 0-17	51 (1.4%)
Age 18-49	771 (21.3%)
Age 50-64	930 (25.7%)
Age 65+	1826 (51.5%)

FIGURE 20: Racial/ethnic distribution of COVID-19 hospitalizations¹



Figure 21: COVID-19 lab positivity and specimens tested by month²



Source: 1. California Department of Public Health Snowflake data; 2. California Reportable Disease Information Exchange (CalREDIE)

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COVID-19

Hospitalizations: The median age of residents hospitalized due to COVID-19 infection was 65, ranging from age 0 to 104. More than three quarters of persons hospitalized due to COVID-19 were age 50 or older [Table 2]. These data do not include persons hospitalized for reasons other than COVID-19 infection who were later diagnosed with COVID-19 while in the hospital. The racial/ethnic distribution of persons hospitalized due to COVID-19 was similar to the racial/ethnic distribution of the County overall [Figure 20].

Lab positivity: Figure 21 shows the percent of total specimens tested for COVID-19 that yielded a positive COVID-19 test result from March through December 2020. The total number of specimens tested in the County increased from 5,996 in March to 247,948 in December. Early in the pandemic, COVID-19 testing could only be performed at the Centers for Disease Control and Prevention (CDC) and was not broadly available. Later, the California Viral and Rickettsial Disease Laboratory (VRDL), as well as the Sacramento County Public Health Laboratory (SCPHL) became certified to test COVID-19 specimens.

Other Vaccine-Preventable Diseases

Vaccine-preventable diseases (VPDs) are diseases for which vaccines have been developed to provide protection against the germs (e.g., viruses) causing the diseases. Vaccines work by introducing certain weakened parts of the germs (i.e., antigens) in very small, safe amounts so that the body's own natural immune system will recognize and make proteins (antibodies) to destroy the germs. Vaccines can prevent infectious diseases that once killed or harmed many infants, children, and adults. They help protect the individual receiving the vaccine and help prevent the spread of the disease in a community – which is especially important to protect the most vulnerable among us (e.g., very young children, immunocompromised) who cannot receive the vaccine themselves.

FIGURE 22: Number of vaccine-preventable diseases reported to the County, 2020¹



VACCINE-PREVENTABLE DISEASES

Figure 22 shows some of the vaccine-preventable diseases (VPDs) reported to the County in 2020. De-duplicated 2020 counts for chronic Hepatitis B – the most commonly reported VPD – were not available from the State at the time of this report. Severe influenza cases were omitted as they are tabulated by influenza season rather than calendar year. Pertussis (whooping cough) cases vary drastically by year, with increases typically seen every 3 to 5 years. Even a few cases of other VPDs can be concerning due to their high level of infectiousness, severity of outcomes and/or resurgence in the United States after a period of near elimination.

Source: 1. California Reportable Disease Information Exchange (CalREDIE)





Note: Rubella includes congenital Rubella





FIGURE 25: Influenza ICU cases and deaths by season



Note: Prior to the 2018-19 flu season only ICU and deaths under age 65 were reportable; all ICU cases and deaths were locally reportable starting the 2018-19 season

Source: 1. California Reportable Disease Information Exchange (CalREDIE)

VACCINE-PREVENTABLE DISEASES

Measles, Mumps and Rubella: The MMR vaccine is a safe and effective vaccine that prevents the spread and severity of three diseases: measles, mumps and rubella. The number of mumps cases increased dramatically in 2017 [Figure 23]. This increase was partially attributable to an outbreak of mumps at a local college affecting nine students, some of whom were County residents. Despite a State-wide outbreak of 125 measles cases between December 2014 and February 2015, no County residents were affected.

Pertussis: Pertussis (whooping cough) can occur at any age, but the majority of cases in 2020 were among children age 0 to 9 [Figure 24]. Pertussis fatalities are most common in young infants who are not yet eligible for vaccination.

Severe influenza: Only intensive care unit (ICU) flu cases and flu deaths under age 65 were reportable prior to the 2018-19 flu season. The 2017-18 influenza season was the most severe season in recent years [Figure 25]. All ICU and deaths became locally reportable in 2018-19.

Foodborne and Waterborne Illness

Foodborne illness (FBI) and waterborne illness (WBI) are common yet preventable. Each year, one in six Americans gets sick by consuming contaminated foods or beverages according to the Centers for Disease Control and Prevention (CDC). FBI/WBI infections are caused by swallowing a variety of different bacteria, viruses, or parasites. Typical symptoms may include upset stomach, nausea, vomiting, diarrhea and/or fever. FBI/WBI can result during bathing, washing, drinking or in food preparation. Following four basic food safety steps at home – clean, separate, cook and chill – can help prevent these illnesses.

FIGURE 26: Number of foodborne and waterborne illnesses reported to the County, 2020¹



FOODBORNE AND WATERBORNE ILLNESS

The most commonly reported FBI/WBI cases in the County in 2020 were giardiasis, campylobacter, and salmonellosis [Figure 26]. However, for some FBI/WBI illnesses, even a few cases are notable. For example, five cases of typhoid fever in a year are more than typical and is partially explained by travel. Typhoid fever is a life-threatening infection caused by the bacterium Salmonella Typhi. FBIs/WBIs are often underreported due to lack of clinical specimen collections needed to obtain a more specific diagnosis than 'food poisoning' via laboratory confirmation.

Source: 1. California Reportable Disease Information Exchange (CalREDIE)













Source: 1. California Reportable Disease Information Exchange (CalREDIE); 2. California Department of Public Health

FOODBORNE AND WATERBORNE DISEASES

Giardiasis: The rate of giardiasis infections per 100,000 population increased from 2012 to 2020, with a peak in 2017 (Figure 27). Increased laboratory testing for these infections, including testing performed at the Sacramento County Refugee Medical Evaluation Clinic, likely accounts for this increase.

Shiga-toxin producing Escherichia coli (STEC): STEC

rates varied by year [Figure 28]. Localized outbreaks can explain some of the variation in these rates over time. A STEC outbreak associated with unpasteurized apple cider sickened 13 people, including 11 County residents in the fall of 2015. There was no single local outbreak that explained the increase in County cases in 2019, but the State overall experienced a similar increase.

Salmonellosis: Similar to STEC, localized outbreaks can explain some of the variation in County Salmonellosis rates over time [Figure 29]. Sixty-three persons, many County residents, became ill with Salmonella infantis in the spring of 2017 after eating a meal containing improperly cooked/handled chicken served at a school fundraiser.

Human Immunodeficiency Virus (HIV)

Human Immunodeficiency Virus (HIV) is most commonly spread through unprotected sexual contact or through sharing equipment for injection drug use. Acquired Immunodeficiency Syndrome (AIDS) is the last stage of HIV infection and occurs when the immune system is damaged to an extent that the person is vulnerable to life-threatening opportunistic infections. No effective cure exists for HIV. Antiretroviral therapy (ART) can help control HIV infection, slow progression to AIDS and reduce HIV transmission. Pre-exposure prophylaxis (PrEP) can be highly effective in reducing risk of HIV in certain populations when taken as directed under the care of a medical professional. Racism, stigma, homophobia, poverty, and barriers to health care drive disparities in HIV and other sexually transmitted infections.





FIGURE 31: Trend in number and rates of AIDS diagnoses per 100,000 population, 2011-2020¹



Sources: 1. California Department of Public Health (CDPH) Office of AIDS (OA) July 2022 Data Use Agreement File; 2. CDPH OA (State rates).

HUMAN IMMUNODEFICIENCY VIRUS

Newly diagnosed HIV: There were 176 newly diagnosed cases of HIV in 2020, or a rate of 11.3 per 100,000 population [Figure 30]. Trends in the County rates were relatively stable from 2011-2020. Recent slight decreases in rates may be due to delayed reporting.

Newly diagnosed AIDS: The number and rate of newly diagnosed AIDS cases has decreased since 2011, indicating that local efforts to delay progression from HIV to AIDS have been effective in recent years [Figure 31].

TABLE 3: Newly diagnosed HIV cases by select race/ethnicity,20201

	Cases	Percent	Rate
Black	58	33.0%	37.2
Hispanic	39	22.2%	10.8
White	54	30.7%	7.5
API	10	5.7%	4.2

FIGURE 32: Number of HIV infections by sex and transmission category, 2011-2020¹



*'Other' includes perinatal and other unspecified. Excludes no risk factor reported.



FIGURE 33: Trend in number and percent of AIDS cases that were concurrently diagnosed with HIV and AIDS, 2011-2020¹

Sources: 1. California Department of Public Health (CDPH) Office of AIDS (OA) July 2022 Data Use Agreement File

HUMAN IMMUNODEFICIENCY VIRUS (HIV)

Race/ethnicity: Blacks had the highest number, proportion and rate of newly diagnosed HIV infections in 2020 [Table 3]. Social determinants previously mentioned, including racism, contribute to these disparities.

Transmission category by sex:

Transmission category is a classification of the risk factor most likely to have been responsible for spread of HIV. The most common transmission category among males from 2011-2020 was adult male sexual contact whereas the most common transmission category for females was adult heterosexual contact [Figure 32].

Concurrent diagnosis: HIV usually advances to AIDS in about ten vears or longer without antiretroviral treatment. Concurrent diagnosis is when a person is diagnosed as having progressed to AIDS within a year of an initial HIV diagnosis. This means that individuals who are concurrently diagnosed may have been unknowingly exposing others to the infection for more than a decade prior to diagnosis. Half of the total AIDS cases in 2017 were concurrently diagnosed [Figure 33].

Other Sexually Transmitted Infections

Sexually transmitted infections (STIs), also called sexually transmitted diseases (STDs) are some of most frequently reported infections at the local, state, and national level. Symptoms of STIs vary, and may be mild or absent, making routine screening vital to ensure prompt treatment. STIs can affect anyone, yet there are persistent disparities in rates of STIs based on age, sex, race/ethnicity, and sexual orientation. Bacterial STIs (e.g., chlamydia, gonorrhea) are curable, but untreated infections can cause irreversible damage such as female infertility. Pregnant women and unborn children are especially vulnerable to complications of STIs.

TABLE 4: Number and rates of sexually transmitted infections reported to the County, 2020¹⁻²

Infection	Count	Rate*	State rank
Chlamydia	7,219		13
Gonorrhea	4,462		3
Syphilis	977		10
primary	175		
secondary	212		
early latent	231		
late latent/unknown duration	359		
Neuro-syphilis (any stage)	1		N/A
Congenital syphilis	18		

*Congenital syphilis rate is per 100,000 live births; all other rates are per 100,000 population

FIGURE 34: Racial/ethnic disparities in select STI rates per 100,000 population, 2020²



Sources: 1. California Reportable Disease Information Exchange (CalREDIE); 2. California Department of Public Health Sexually Transmitted Diseases Branch

SEXUALLY TRANSMITTED INFECTIONS

Most commonly reported STIs:

The most commonly reported STIs in the County in 2020 were chlamydia, followed by gonorrhea and then syphilis [Table 4]. Syphilis in the primary or secondary (P&S) stage accounted for about forty percent of all syphilis cases reported in 2020.

Racial/ethnic disparities: Blacks were disproportionately affected by STIs in 2020. Most notably, Blacks had a rate of gonorrhea over seven times that of Whites. [Figure 34]. Asian/Pacific Islanders had the lowest rates of STIs.

FIGURE 35: Chlamydia rates per 100,000 population by sex and age group, 2020¹



FIGURE 36: Gonorrhea rates per 100,000 population by sex and age group, 2020¹



FIGURE 37: Trend in percent of female chlamydia and gonorrhea cases who were pregnant, 2011-2020¹



Sources: 1. California Reportable Disease Information Exchange (CalREDIE)

SEXUALLY TRANSMITTED INFECTIONS

Chlamydia: Rates of chlamydia were higher for females than for males in 2020 [Figure 35]. The highest rates for female were between ages 15 and 29. Male cases were slightly older on average, with the highest rates between ages 20 to 34.

Gonorrhea: Rates of gonorrhea were higher for males than for females in 2020 [Figure 36]. Rates were the highest in age group 20 to 24 for females and age group 25 to 29 in males.

Pregnant cases: Rates of chlamydia and gonorrhea have increased statewide since 2011 [data not shown]. However, the proportion of female chlamydia and gonorrhea cases who were pregnant has decreased over time [Figure 37]. This may be partially due to increased hormonal birth control usage and/or increased targeted prevention and education efforts for women of childbearing age.

FIGURE 38: Trend in primary and secondary syphilis rates per 100,000 population, County vs. State, 2011-2020¹



2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

FIGURE 39: Primary and secondary syphilis rates per 100,000 population by sex and age group, 2020¹



FIGURE 40: Trend in number and rate* of congenital syphilis, 2012-2020¹



Sources: 1. California Reportable Disease Information Exchange (CalREDIE); 2. California Department of Public Health Sexually Transmitted Diseases Branch

SEXUALLY TRANSMITTED INFECTIONS

Syphilis trend: The County primary and secondary (P&S) syphilis rate increased 199% from 8.2 per 100,000 population in 2011 to 24.5 in 2017 [Figure 38]. This was very similar to the increasing trend statewide.

Syphilis sex and age: P&S syphilis rates were higher in males than females in 2020 [Figure 39]. This disparity is largely due to the state-wide syphilis outbreak initially among men who have sex with men (MSM) populations that later spread to heterosexual populations. Rates were highest in the 25 to 29 age group for males and 30 to 34 for females. Syphilis infections among women of child-bearing age (age 15 to 44) are especially concerning due to the potential risk of congenital syphilis. Syphilis infection in a pregnant female can cause miscarriage, stillbirth, prematurity, low birth weight, or death shortly after birth.

Congenital syphilis: The rate of congenital syphilis cases per 100,000 live births in the County greatly increased from 2012 to 2020 [Figure 40]. There were no congenital syphilis cases in the County in 2012, whereas there were 18 in 2020.

Tuberculosis

Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis. TB is spread through the air from person to person. About 5-10% of infected persons who do not receive treatment for latent TB infection (LTBI) will later develop TB disease. The site of TB infection is most commonly the lungs (pulmonary TB), but infection can occur outside the lungs (extra-pulmonary TB). Common symptoms of pulmonary TB include a cough lasting at least three weeks, chest pain, and coughing up blood or sputum (phlegm in lungs). LTBI and TB disease are treatable with specific drug regimens. Treatment can be long and complicated depending on the characteristics of the patient (e.g., HIV co-infection) and the infection (e.g., drug resistance).

FIGURE 41: Trend in TB rates, County vs. State vs. HP2020 Objective, 2011-2020¹



FIGURE 42: Select demographic characteristics of TB cases, 2020¹



Source: 1. California Department of Public Health Tuberculosis Control Branch

TUBERCULOSIS

TB trends: There were 53 cases of active TB disease in the County in 2020. The rate of TB disease in the County declined 35.9% from 5.2 per 100,000 population in 2011to 3.3 in 2020 [Figure 41]. Both the County and State were above (i.e., did not meet) the Healthy People 2020 (HP2020) objective of a rate not more than 1.0.

TB demographics: A higher proportion of TB cases were male compared to female in 2020 [Figure 42]. Asian/Pacific Islanders and foreign-born persons were disproportionately represented among cases. About one-third (32%) of TB cases in 2020 were age 65 or older.









FIGURE 45: First-line TB drug resistance, 2020¹



Source: 1. California Department of Public Health Tuberculosis Control Branch

TUBERCULOSIS

Site of disease: The majority of TB cases in the County in 2020 had TB infection of the lungs (pulmonary TB) only [Figure 43]. The most common extrapulmonary sites of disease were pleural and peritoneal [data not shown].

Diabetes co-morbidity: People living with diabetes mellitus who get infected with TB are more likely to develop active TB disease and become sick. Over one-third of County TB cases in 2020 also had diabetes [Figure 44].

Drug-resistance: In 2020, 37 of the 53 (69.8%) TB cases in the County were able to be tested for drug resistance. Of these cases, nine were resistant to Isoniazid (INH), two to pyrazinamide (PZA) and one to rifampin (RIF) [Figure 45]. Multi-drug resistant TB (MDR-TB) is when TB bacteria is resistant to at least INH and RIF. One TB case was MDR-TB in 2020.

Zoonotic Diseases

Zoonotic diseases are diseases that can be spread between animals and humans. Zoonotic diseases can be caused by viruses, bacteria, parasites, and fungi through contact with body fluids (blood, saliva, or waste) of infected animals. Vector-borne diseases (VBDs) are a subset of zoonotic diseases that are spread to humans through bites from mosquitoes, ticks, and fleas. Taking steps to prevent bites and reduce local population of the vectors is the best way to avoid these diseases. Common diseases that are considered both zoonotic and foodborne/water-borne (e.g., salmonellosis) were included in the foodborne section of this report.



FIGURE 46: Number of zoonotic diseases reported to the County, 2020¹

ZOONOTIC DISEASES

Three of the four most commonly reported zoonotic diseases in 2020 were vector-borne diseases transmitted through mosquito bite: malaria, West Nile virus, and Dengue [Figure 46]. The number of leptospirosis (1), Q-fever (1), and brucellosis (1), and anaplasmosis/ehrlichiois (1) cases were typical of the number reported each year to the County; these are bacteria often transmitted from contact with infected animals such as goats, sheep and cattle. Lyme disease is caused by the bacterium Borrelia burgdorferi and is spread to humans through the bite of infected blacklegged ticks. There were no other cases of tick-borne diseases besides Lyme reported to the County in 2020.

Source: 1. California Reportable Disease Information Exchange (CalREDIE)

FIGURE 47: West Nile virus cases by type, 2012-2020



FIGURE 48: Trend in number of infections transmitted by the *Aedes* species mosquitos, 2012-2020¹



^{*}Zika became reportable in 2016

Source: 1. California Reportable Disease Information Exchange (CalREDIE)

West Nile virus: West Nile virus (WNV) is the leading cause of mosquito-borne disease in the continental United States. Most people infected with WNV do not feel sick. About one in five develop a fever and other symptoms. About one in 150 persons infected get severe (neuroinvasive) disease. Despite being rare, severe cases are more likely to be diagnosed and reported; the number of WNV fever (non-neuroinvasive) cases is generally under-diagnosed and therefore under-reported. Therefore, a large percentage of reported WNV cases are neuroinvasive [Figure 47].

Aedes species mosquitos:

Aedes aegypti mosquitoes are the main type of mosquito that spreads chickungunya, dengue, yellow fever and Zika viruses as they prefer to feed on humans. They are not native to California and were not yet found in the County in 2020. All of the cases of chickungunya, dengue and Zika among County residents from 2012-2020 were associated with travel outside the County [Figure 48]. There were no cases of yellow fever during this period.

CHRONIC DISEASE

Alzheimer's Disease

Alzheimer's disease is a progressive disease beginning with mild memory loss possibly leading to loss of the ability to carry on a conversation and respond to the environment. It involves parts of the brain that control thought, memory, and language. Alzheimer's is the most common type of dementia in the United States, with an estimated five million Americans living with the disease. Age is the best-known risk factor for Alzheimer's, with symptoms typically appearing after age 60. Researchers are studying whether education, diet and the environment play a role in developing Alzheimer's. Physical, mental, and social activities may reduce the risk of the disease.







FIGURE 50: Alzheimer's disease deaths by race/ethnicity, 2020²

ALZHEIMER'S DISEASE

Trend: Deaths due to Alzheimer's disease increased greatly during the ten-year period from 2011 to 2020. The age-adjusted rate of death increased 99.6% from 27.2 in 2011 to 54.3 in 2020 [Figure 49].

Race/ethnicity: Whites made up the majority of deaths due to Alzheimer's and are disproportionately affected by the disease compared to all other racial/ethnic groups [Figure 50]. Hispanics have less than half the expected proportion of Alzheimer's deaths given the County population.

Sources: 1. Vital Records Business Intelligence System

FIGURE 51: Proportion of Alzheimer's disease emergency department visits by sex, 2020¹



FIGURE 52: Number of Alzheimer's emergency department visits by age group, 2020¹



FIGURE 53: Number of Alzheimer's disease emergency department visits by race/ethnicity, 2020¹



ALZHEIMER'S DISEASE

Emergency Department Visits: There were a total of 164 emergency department (ED) visits due to Alzheimer's disease which did not result in a hospital admission in the County in 2020.

Sex: Nearly two-thirds of all Alzheimer's ED visits in the County were among females in 2020 [Figure 51].

Age group: Most (88.4%) Alzheimer's ED visits in the County were among persons age 70 and older in 2020 [Figure 52]. Not surprisingly, there were no Alzheimer's ED visits among those age less than 40.

Race/ethnicity: Nearly two-thirds of all Alzheimer's ED visits in the County were among Whites in 2020 [Figure 53]. Blacks, Hispanics and Asian/Pacific Islanders accounted for about one-third of Alzheimer's ED visits. The racial/ethnic breakdown of 2020 Alzheimer's ED visits is similar to the pattern seen in 2020 deaths.

Source: 1. California Department of Public Health Office of Health Care Access and Information, Emergency Department Data 2020

Asthma

Asthma is a chronic disease of the lungs that affects 25 million people in the United States, including six million children. It causes repeated episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. In an asthma attack, the airways become inflamed, making breathing difficult. The exact causes of asthma are unknown in most cases. Asthma can be controlled by taking medicine and avoiding triggers in the environment that can cause an attack. Asthma can result in frequent emergency department (ED) visits, hospitalizations, and premature death without proper management.

TABLE 5: Estimated asthma prevalence by age group, County vs.State, 2019-20201

	County	State
Lifetime asthma prevalence (Age 18+)	18.6%	16.2%
Lifetime asthma prevalence (Age 0-17)	8.1%	11.9%
Active asthma prevalence (All ages)	7.6%	7.4%
Active asthma prevalence (Age 18+)	10.6%	9.1%

FIGURE 54: Age-adjusted emergency department visits by race/ethnicity, 2019¹



ΑSTΗΜΑ

Prevalence: The estimated lifetime asthma prevalence and active asthma prevalence for all ages were higher in the County compared to the State in 2019-2020 [Table 5]. However, the estimated childhood (age 0 to 17) lifetime and active asthma prevalence were lower in the County compared to the State.

Demographics: The rate of asthma ED visits among Blacks was nearly five times the rate of asthma ED visits among Whites in 2020 [Figure 54]. Young children had the highest rate of asthma ED visits in 2020 compared to all other age groups [data not shown].

Source: 1. California Breathing County Asthma Dashboard

https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHIB/CPE/Pages/CaliforniaBreathingCountyAsthmaProfiles. aspx

Cancer

Cancer is a collection of related diseases. In all types of cancer, abnormal cells divide without control and can invade other tissues. Cancer can start almost anywhere in the human body. Many cancers (but not all) form solid tumors, which are masses of tissue. Cancerous tumors can be malignant, with means they can spread into, or invade, nearby tissues. As these tumors grow, they may also break off and travel to distant places in the body through the blood and lymph systems and form new tumors. About 38.4% of men and women will be diagnosed with cancer at some point during their lifetimes.

FIGURE 55: Trend in cancer (all sites) crude death rates per 100,000, 2011-2020¹



FIGURE 56: Proportion of Cancer (all sites) deaths by race/ethnicity, 2020¹



TABLE 6: Age-adjusted death rates by sex and cancer site, 2020¹

Site of cancer	Female	Male
Lung and bronchus	29.3	39.2
Breast - female	22.0	
Prostate		21.1
Colorectal	14.0	16.4
Leukemia	6.1	7.4
Lymphoma	6.0	8.4

Sources: 1. Vital Records Business Intelligence System

CANCER

Death trend: The age-adjusted cancer (all sites) death rate per 100,000 population decreased by 7.3% from 167.8 per 100,000 population in 2011 to 155.6 in 2020 [Figure 55].

Race/ethnicity: Nearly two-thirds of deaths due to cancer (all sites) were among Whites in 2020 [Figure 56]. The proportion of cancer deaths among Hispanics (9.9%) was lower than expected given the overall Hispanic population.

Site of disease by sex: Death rates by site of disease varied somewhat by sex in 2020 [Table 6]. Lung and bronchus cancer was the deadliest site of disease for both females and males. The second most deadly cancer for females was breast cancer, as opposed to prostate cancer for males. Colorectal, leukemia and lymphoma were in the top five most deadly cancers for both sexes.

Cardiovascular Disease

Cardiovascular diseases include heart disease and stroke. The term 'heart disease' refers to several types of heart conditions and is the leading cause of death in the United States. The most common type of heart disease is coronary artery disease, which can lead to heart attack. A stroke, sometimes called a brain attack, occurs when something blocks blood supply to part of the brain or when a blood vessel in the brain bursts. A stroke can cause lasting brain damage, long-term disability or even death. Healthy lifestyle changes – diet, exercise, no smoking, limited alcohol, and reduced stress – can greatly reduce the risk for cardiovascular diseases.

FIGURE 57: Trend in age-adjusted heart disease and stroke death rates, 2011-2020¹



FIGURE 58: Age-adjusted major cardiovascular disease death rates overall and by subcategory by sex, 2020¹



CARDIOVASCULAR DISEASES

Trends: The age-adjusted heart disease rate decreased by 15.0% from 169.0 deaths per 100,000 population in 2011 to 143.6 in 2020 [Figure 57]. There was a much lower death rate due to stroke across all years, but the rate increased (+23.1%) from 38.3 in 2011 to 49.8 in 2020.

Cardiovascular disease subcategory by sex: Males had higher death rates of cardiovascular disease overall and in the most common subcategories in 2020 [Figure 58]. However, females had higher rates of death due to stroke than males.

Sources: 1. Vital Records Business Intelligence System

Diabetes Mellitus

Diabetes mellitus is a chronic health condition that affects how the body turns food into energy. Most food eaten is turned into glucose (sugar) and released it into the bloodstream. When blood sugar goes up, it signals the pancreas to release insulin so that body's cells can use it for energy. Type 1 diabetes is thought to be an autoimmune reaction that stops the body from making insulin. Type 2 diabetes is when the body doesn't use insulin well and can't keep blood sugar at normal levels. Diabetes can be managed by maintaining a healthy weight, eating healthy food, being active and taking medicine as needed. Uncontrolled diabetes can lead to serious health problems, such as heart disease, vision loss and kidney disease.

TABLE 7: Estimated diabetes mellitus prevalence (all ages),County vs. State, 20201

	County	State
Ever diagnosed with diabetes	8.1%	10.9%

FIGURE 59: Estimated diabetes mellitus prevalence (all ages) by select race/ethnicity, 2011-2020 pooled data¹







Sources: 1. California Health Interview Survey; 2. Vital Records Business Intelligence System

DIABETES MELLITUS

Prevalence: Less than one in ten persons in the County are estimated to have ever been diagnosed with diabetes [Table 7]. This is lower than the State overall.

Race/ethnicity: Asians had the highest estimated proportion of population with diabetes compared to other racial/ethnic groups for combined survey data from years 2011 to 2020 [Figure 59]. Estimates for Pacific Islander and American Indian or Alaskan Native groups were not stable due to small survey numbers.

Death trend: The death rate due to diabetes increased 38.0% from 21.6 per 100,000 population in 2011 to 29.8 in 2020 [Figure 60].

Obesity

Obesity is a national epidemic and a major contributor to some of the leading causes of death in the United States, including heart disease, stroke, diabetes, and some types of cancer. Body mass index (BMI) is used as a screening tool for adult overweight and obesity. A high BMI can be an indicator of high body fatness. Centers for Disease Control and Prevention (CDC) Growth charts are an indicator to measure the size and growth patterns of children and teens in the United States. There is no single or simple solution to the obesity epidemic. Policy makers, state and local organizations, schools, and individuals all must work together to create an environment that supports a healthy lifestyle and healthy choices.









ΟΒΕΣΙΤΥ

Death trend: The death rate due to obesity increased 112.5% from 1.6 per 100,000 in 2011 to 3.4 in 2020 [Figure 61]. Although deaths with obesity listed as the underlying cause of death on death certificates were relatively low, obesity is a contributing factor to many leading causes of death.

Adult body mass index (BMI): Only about one-third of adults surveyed from 2016 to 2020 in the County had a healthy BMI (BMI of 18.5 to less than 25) [Figure 62]. The majority (62.9%) were overweight or obese.

Sources: 1. Vital Records Business Intelligence System; 2. California Health Interview Survey

Oral Health

Oral health affects the ability to speak, smile, eat and show emotions. It also affects self-esteem and attendance at work or school. Oral diseases, which range from cavities to gum disease to oral cancer, cause pain and disability for millions of Americans. Oral health has been linked with other chronic diseases, like diabetes and heart disease. It has also been linked with risky behaviors like using tobacco and eating or drinking foods and beverages high in sugar. Cavities (tooth decay) are one of the most common chronic diseases in the United States, with 80% of people having at least one cavity by age 34. Public health strategies such as water fluoridation and school sealant programs have been proven to prevent cavities.

FIGURE 63: Oral Health-related emergency department visit rates per 10,000 population by age group¹ 2020²



FIGURE 64: Denti-Cal dental services utilization, 2020¹



ORAL HEALTH

Emergency department (ED) visit by age: The rates of oral healthrelated ED visits varied by age group in 2020, with the highest rates among young adults age 20 to 39 and children age less than 5 [Figure 63].

Denti-Cal utilization: The most common Denti-Cal services utilization in 2020 was annual dental visit [Figure 64]. Utilization of services, such as sealant, were likely lower than prior years due to COVID-19 related school closures and lockdowns.

Sources: 1. California Department of Healthcare Access and Information

Tobacco Use

Tobacco use leads to disease and disability and harms nearly every organ in the body. Smoking means inhaling, exhaling, burning, or carrying any lighted or heated cigar, cigarette, or pipe, or any other lighted or heated tobacco or plant product intended for inhalation, whether natural or synthetic. Smoking includes the use of an electronic smoking device that creates an aerosol or a vapor. It causes cancers, heart disease, stroke and chronic obstructive pulmonary disease. It also increased the risk for tuberculosis and problems of the immune system. Children who are exposed to secondhand smoke are at increased risk for sudden infant death syndrome, acute respiratory infections, more severe asthma, and other health effects.



FIGURE 66: Current use of at least one tobacco product by gender, sexual orientation and race/ethnicity, California high school students, 2019-20 academic year²



Sources: 1. California Health Interview Survey; 2. Statewide California Student Tobacco Survey 2019-20

TOBACCO USE

Adult smoking status: Less than one in ten County adults were estimated to be current smokers in 2020 [Figure 65]. About onefifth were estimated to be former smokers and over two thirds were estimated to be never smokers.

California (CA) high school tobacco use: Self-reported use of at least one tobacco product among CA high school students varied by demographics in the 2019-20 academic year [Figure 66]. Gender non-binary, LGBTQ and Native Hawaiian or other Pacific Islander students had the highest prevalence of tobacco use.

MATERNAL CHILD HEALTH

Maternal Characteristics

Maternal characteristics, such as maternal race/ethnicity and maternal age, are important for developing targeted public health strategies to prevent adverse birth outcomes and address disparities in maternal and child health.

FIGURE 67: Proportion of total births by maternal race/ethnicity, 2020¹



*All other includes multi-race and American Indian/Alaskan Native

FIGURE 68: Trend in fertility rates by select maternal race/ethnicity, 2011-2020¹



Sources: 1. Vital Records Business Intelligence System

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MATERNAL CHARACTERISTICS

Total births: There were a total of 17,978 babies born to Sacramento County women in 2020. This was a 5.4% decrease from the prior year, which may be partially due to the COVID-19 pandemic.

Maternal race/ethnicity: White mothers accounted for the highest proportion of births in 2020 [Figure 67]. However, the percent of births to White mothers was less than the proportion of overall population that was White.

Fertility rates: A fertility rate is the number of live births per 1,000 women age 15 to 44. The overall fertility rate for the County decreased by 14.1% from 66.0 in 2011 to 56.7 in 2020 [Figure 68]. The most dramatic decline in fertility rate from 2011 to 2020 was among Black mothers (-27.2%).

FIGURE 69: Proportion of births by maternal age group, 2020¹



FIGURE 70: Trend in teen (age 15-19) birth rate, 2011-2020¹







Sources: 1. Vital Records Business Intelligence System

MATERNAL CHARACTERISTICS

Maternal Age: Nearly two thirds of births in the County in 2020 were to mothers age 20 to 34 [Figure 69]. About one in five were born to mothers who are considered advanced maternal age (age 35+). Less than 5% of births in the County were born to teen mothers.

Teen birth rate: The teen birth rate has steadily declined over time in the County [Figure 70]. The rate decreased by 170.7% from 26.8 births per 1,000 females age 15 to 19 in 2011 to 9.9 in 2020. These declines were seen for all racial/ethnic groups [data not shown].

Medicaid: Nearly 45% of all women in the County who gave birth in 2020 had Medicaid as an anticipated source of delivery payment [Figure 71]. Medicaid is sometimes used as a proxy for poverty status. There were clear differences between White mothers and non-White mothers in terms of level of poverty using this indicator.

Prenatal Behaviors

Prenatal behaviors play a large role in the health of mother and baby. The quality, quantity, and timing of prenatal care influence birth outcomes. The risk of low birth weight (LBW) is reduced for women who initiate care during the first trimester (first three months) of pregnancy. Substance use during pregnancy can also affect birth outcomes. Smoking during pregnancy doubles the risk of LBW and is a factor in 20-40% of LBW infants in the United States.¹ Prenatal behaviors are dependent upon both individual choices and the social environment; not all women have the same opportunities or ability to exert control over their prenatal situation.

FIGURE 72: Early entry into prenatal care by select maternal race/ethnicity, 2020¹



FIGURE 73: Trend in tobacco use anytime during pregnancy, 2011-2020²



Sources: 1. Vital Records Business Intelligence System

PRENATAL BEHAVIORS

Early prenatal care: One healthy people 2020 (HP2020) objective is to increase the proportion of pregnant women who receive prenatal care beginning in the first trimester nationally to 77.9%. The County overall and all listed racial/ethnic group met this objective in 2020 [Figure 72].

Tobacco use during pregnancy: The proportion of women who reported any tobacco use during pregnancy decreased by 136.8% from 4.5% in 2011 to 1.9% in 2020 [Figure 73]. Tobacco use during pregnancy may be underreported.

Birth Outcomes

Healthy birth and maternal outcomes are the goal of every delivery. Preterm birth (PTB) is when a baby is born too early (before 37 weeks of pregnancy). Low birth weight (LBW) is when a baby is born less than 2,500 grams (~5.5 lbs.) and very low birth weight (VLBW) is less than 1,500 grams (~3.3 lbs.). The earlier and smaller a baby is born, the higher the risk of death or serious disability. Cesarean birth is associated with higher maternal morbidity than vaginal birth. Obstetric deaths are those resulting from complications of pregnancy, and/or interventions, omissions, or incorrect treatment. Maternal death has a broader definition and includes deaths from complications of pregnancy up to 42 days after birth or end of pregnancy. Late maternal death is death of a mother up to one year after end of pregnancy, due to direct or indirect obstetric causes.

FIGURE 74: Trend in proportion of births that are delivered preterm, 2011-2020¹



FIGURE 75: Preterm birth and low birth weight by select maternal race/ethnicity, 2020¹



BIRTH OUTCOMES

Preterm birth: The County overall has consistently met the HP2020 target for preterm birth (PTB) of under 11.4% [Figure 74]. The proportion of births that were preterm in the County increased by 10.8% from 8.3% in 2011 to 9.2% in 2020.

Disparities in PTB and LBW:

There were distinct racial/ethnic disparities in PTB and LBW [Figure 75]. Black and Hispanic mothers had the highest proportion of babies born too early whereas Black and Asian/Pacific Islander mothers had the highest proportion born with LBW.

Sources: 1. Vital Records Business Intelligence System

FIGURE 76: Proportion of low-risk* women with a first cesarean delivery and repeat cesarean delivery, 2020¹



*Low risk is defined as a singleton, term pregnancy with baby in the vertex position

FIGURE 77: Infant death rates by race/ethnicity, 2020¹



FIGURE 78: Trend in obstetric deaths per 100,000 live births by maternal race/ethnicity, 2011-2020 three-year rolling average¹



Sources: 1. Vital Records Business Intelligence System

BIRTH OUTCOMES

Cesarean delivery: The County overall met the HP2020 targets for no more than 23.9% of lowrisk mothers having a first cesarean delivery and no more than 81.7% of low-risk mothers with a prior cesarean having a repeat cesarean [Figure 76]. However, cesarean delivery varied drastically by delivery hospital or birthing center [data not shown].

Infant deaths: Infant death rate is the number of deaths among children less than one year old per 1,000 live births. The County overall met the Healthy People 2020 (HP2020) objective of no more than six infant death per 1,000 live births [Figure 77]. Black infants died at higher rates than the HP2020 objective.

Obstetric deaths: Obstetric deaths are those for which pregnancy and/or childbirth were the underlying cause of death. There was a total of 29 obstetric deaths in the County from 2010 to 2020, 11 (37.9%) of whom were Black women. Black women have been increasingly disproportionally affected by obstetric deaths [Figure 78].

INJURY

Poisonings

Substance use can result in fatal and non-fatal overdoses (i.e., poisonings). Drug overdoses occur when an individual consumes enough of a drug (whether it is prescription, illicit or over the counter) to cause harmful effects. An effective public health response includes education on risks and encourages harm reduction practices. Substance use disorders are treatable diseases, yet stigma about substance use disorders contribute to the evolving epidemic.

FIGURE 79: Trend in poisoning death rates per 100,000, County vs. State, 2016-2020¹



FIGURE 80: Trend in number of poisoning emergency department visits, 2016-2020



P O I S O N I N G S

Poisoning is a leading cause of death in the United States. In 2020 there were 91,799 drug overdose death in the US and 305 in the County.

Trends: Poisoning death rates increased in both the County and State from 2016 to 2020 [Figure 79]. The State rate surpassed the County rate for the first time in 2020. Both the County and State did not meet the Healthy People 2020 goal of no more than 11.3 poisoning deaths per 100,000. The number of poisoning emergency department visits in the County decreased in 2020 despite death rates increasing [Figure 80]. Issues with access to care and isolation during the COVID-19 pandemic may have contributed to this phenomenon.

Sources: 1. California Department of Public Health EpiCenter https://skylab4.cdph.ca.gov/epicenter/

FIGURE 81: Injury intent of drug-poisoning emergency department visits vs. poisoning deaths, 2016-2020 combined¹



FIGURE 82: Proportion of poisoning emergency department visits and deaths by sex, 2016-2020 combined¹



FIGURE 83: Poisoning emergency department visit and death rates per 100,000 by select race/ethnicity, 2016-2020 combined¹



Sources: 1. California Department of Public Health EpiCenter https://skylab4.cdph.ca.gov/epicenter/

POISONINGS

Injury intent: A larger percent of poisoning deaths were unintentional compared to emergency department (ED) visits from 2016 to 2020 [Figure 81]. ED visits were three times more likely to be a result of self-harm compared to deaths.

Sex: Poisoning injury ED visits were more common among females than males from 2016 to 2020 [Figure 82]. However, over two-thirds of poisoning deaths during this time were male.

Race/ethnicity: There were racial disparities in rates of poisoning injury ED visits and deaths in the County [Figure 83]. Blacks, followed by Whites, had the highest rates from 2016 to 2020. Some racial/ethnic groups are not displayed due to small numbers. Disparities in poisoning injuries have increased over time nationwide. Differences in access to substance use care and treatment may continue to widen these disparities.

FIGURE 84: Age-adjusted opioid-related overdose death rates per 100,000 population, County vs. State, 2011-2020¹





2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

FIGURE 86: Opioid prescriptions by sex, 2020¹



FIGURE 87: Opioid-related hospitalization rates per 10,000 by select race/ ethnicity, 2020¹



Sources: 1. California Overdose Surveillance Dashboard https://skylab.cdph.ca.gov/ODdash/?tab=CTY

OPIOIDS

Opioid overdose trends: State and County opioid overdose death rates were similar over time except for 2020 [Figure 84]. The State death rate in 2020 was more than twice that of the County. Fentanyl deaths in the County increased by 800% from six in 2011 to 54 in 2020 [Figure 85]. Opioid death rates may be influenced by localized clusters, toxicology testing, and provider death certificate reporting.

Opioid prescriptions by sex:

There were over 700,000 opioid prescriptions written to County residents in 2020, with females receiving about two thirds of these prescriptions [Figure 86]. The number of opioid prescriptions has decreased over time in the County, with over 300,000 fewer prescriptions written in 2020 compared to 2017.

Opioids and race/ethnicity: Like total poisoning deaths, Blacks had the highest rate of opioid overdose deaths in the County in 2020, followed by Whites and then Hispanics [Figure 87]. Some racial/ethnic groups are not displayed due to small numbers.

Unintentional Injuries

Unintentional injuries including drowning, falls and traffic collisions are often preventable with safety measures. Unintentional injuries resulted in 748 deaths, 9,685 hospitalizations, and 87,256 emergency department visits in the County in 2020. Males accounted for two-thirds of unintentional injury deaths in the County from 2016 to 2020.

FIGURE 88: Drowning/submersion deaths, hospitalizations, and emergency department visits by sex, 2016-2020



FIGURE 89: Drowning deaths by year, County vs. State¹



FIGURE 90: Drowning death rates by age group, 2016-2020¹



Sources: 1. California Department of Public Health EpiCenter https://skylab4.cdph.ca.gov/epicenter/

DROWINGS

Drowning is a leading cause of death for children. Risk factors for drowning include inability to swim, risky swim behaviors, alcohol, and other drug use. Drowning injuries can cause brain damage and other serious outcomes.

Sex: Males are disproportionately affected by drowning/ submersion injures [Figure 88]. Notably, males accounted for over three quarters of drowning deaths from 2016 to 2020.

Trends: Figure 89 shows drowning deaths and rates by year. Although rates of drowning are relatively low, they were higher in the County compared to the State overall.

Age: Persons in age group 20 to 29 had the highest drowning death rate in the County from 2016 to 2020 [Figure 90]. Nationwide, children age 1 to 4 have the highest rates of drowning death.





FIGURE 92: Number of fall-related emergency department visits, 2016-2020



FIGURE 93: Fall deaths by age group, 2016-2020 combined



FIGURE 94: Fall-related hospitalization rates per 100,000 by race/ethnicity, 2020



Sources: 1. California Department of Public Health EpiCenter https://skylab4.cdph.ca.gov/epicenter/

FALLS

Falls are a leading injury-related cause of death for older adults. Fall risks include medication, poor strength, and poor balance.

Trends: Death rates due to falls were higher in the County compared to the State [Figure 91]. Deaths rates due to falls increased in 2020. However, the number of fall-related emergency department (ED) visits declined in 2020 [Figure 92]. The COVID-19 pandemic may have contributed to this phenomenon.

Age: The majority (85%) of fall deaths occurred among County residents age 65 and older [Figure 93]. Nearly half occurred among those age 85 and older.

Race/ethnicity: Whites had the highest rates of fall-related hospitalization in the County in 2020 [Figure 94]. Hispanics had the lowest fall-related hospitalization rates. These disparities were similar for deaths and ED visits [data not shown].



FIGURE 96: Trend in proportion of traffic collisions that were fatal, 2016-2020¹



FIGURE 97: Fatal traffic collisions by collision type, 2016-2020 combined¹



TABLE 8: Traffic collisions by location, 2016-2020 combined¹

location	Total collisions	Dercent Eatal
LOCATION		
Unincorporated	17,679	2.3%
Sacramento	16,423	1.5%
Elk Grove	2,603	1.1%
Citrus Heights	1,584	1.1%
Rancho Cordova	1,475	1.2%
Folsom	1,183	2.2%
Galt	307	3.3%
Isleton	7	N/A*

*Data not shown due to small numbers

Sources: 1. UC Berkely Transportation Information Management System

TRAFFIC COLLISIONS

Traffic collision injuries and deaths are preventable. Factors including improper seat belt use, impaired driving, and distracted driving contribute to traffic collision injuries and deaths.

Trends: The number of traffic collisions in the County was relatively consistent until a sharp decrease in the first year of the COVID-19 pandemic [Figure 95]. However, more of the collisions in 2020 were fatal [Figure 96]. Over 20% of fatal collisions involved alcohol from 2016 to 2020, and 30% of non-fatal collisions involved speeding.

Collision type: Over half of fatal traffic collisions in the County from 2016 to 2020 involved either pedestrians, motorcycles or bicycles [Figure 97]. Pedestrians were involved in about a third of fatal collisions despite only making up 6.4% of total collisions.

Location: Over 80% of total collisions in the County from 2016 to 2020 occurred in either unincorporated areas of the County or the city of Sacramento [Table 8]. Galt, unincorporated County, and Folsom had the highest proportion of fatal collisions.

Violence

Violence can have long-lasting harmful effects on individuals, families, and communities. Violence has increasingly been recognized as a public health problem requiring public health solutions.

FIGURE 98: Homicide rates per 100,000 by select victim race/ethnicity, 2011-2020¹



FIGURE 99: Homicides and homicide rates per 100,000 by victim age group, 2018-2020¹



TABLE 9: Homicides by mechanism and victim's sex, 2011-2020²

Mechanism	Female	Male	Total
Firearms	49.4%	69.9%	66.2%
Sharp object	13.1%	9.9%	10.5%
Suffocation/hanging	8.5%	1.1%	2.5%
Other	29.0%	19.0%	20.8%

Sources: 1. Vital Records Business Intelligence System

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HOMICIDE

Homicide is the act of one human killing another, regardless of perpetrator intent or legal category of homicide (e.g., manslaughter). There were 971 homicides in the County from 2011 to 2020, 127 of which occurred in 2020.

Trends & race/ethnicity: The County homicide rate increased 32.6% from 6.1 per 100,000 population in 2011 to 8.1 in 2020 [Figure 98]. Blacks were much more likely than other groups to be victims of homicide. In 2020, the rate among Blacks increased 65.0% from 17.5 in 2011 to 28.8 in 2020.

Age: Young adults age 20 to 29 had the highest number and rate of homicide victimhood during years 2018 to 2020 [Figure 99].

Mechanism and sex: Firearms were the most common mechanism of homicide in 2020 in the County, especially among male victims [Table 9].

FIGURE 100: Suicide rates per 100,000 by select race/ethnicity, 2011-2020¹



FIGURE 101: Suicides and suicide rates per 100,000 by age group 2018-2020¹



TABLE 10: Suicides by mechanism and victim's sex, 2011-2020²

Mechanism	Female	Male	Total
Firearms	15.5%	46.2%	38.9%
Suffocation/hanging	29.6%	31.6%	31.1%
Poisoning	39.6%	10.2%	17.2%
Other	15.3%	12.0%	12.8%

SUICIDE

The causes of suicide are complex and determined by multiple factors. Suicide prevention focuses on promoting resilience and reducing risk factors.

Trends & race/ethnicity: There were a total of 2,008 suicide deaths in the County from 2011 to 2020, 192 of which occurred in 2020. Whites consistently had the highest rates of suicide compared to other groups [Figure 100]. In 2020, Whites, Hispanics and Blacks were above (i.e., did not meet) the Healthy People 2020 goal of no more than 10.2 suicide deaths per 100,000 population.

Age group: Suicides

disproportionately affected older adults in the County in 2018 to 2020 with the highest rates among those age 75 and older [Figure 101]. The highest number of suicide deaths were among age group 30 to 39.

Mechanism and sex: The mechanism of suicide varied by sex in the County, with males most likely to use firearms and females most likely using poisoning [Table 10].

Sources: 1. Vital Records Business Intelligence System

FIGURE 102: Trend in firearm-related death rates per 100,000, County vs. State, 2016-2020¹



FIGURE 103: Trend in number of firearm-related emergency department visits by sex, 2016-2020¹



FIGURE 104: Firearms-related injury emergency department visit rates per 100,000 by age group, 2020¹



TABLE 11: Firearm-related emergency department visit rates per 100,000 by sex and select race/ethnicity, 2016-2020 combined¹

	Male	Female	Total
Black	94.7	17.3	55.4
Hispanic	22.7	2.9	12.9
White	9.2	1.7	5.4
ΑΡΙ	7.1	N/A*	4.1

Sources: 1. California Department of Public Health EpiCenter https://skylab4.cdph.ca.qov/epicenter/

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FIREARMS

Firearm violence is a public health concern that impacts the health and safety of communities. Important gaps remain in knowledge of the problem and how to prevent it.

Trends: The County had a higher rate of firearm-related death rates per 100,000 population than the State overall from 2016 to 2020 [Figure 102]. The County rate increased 18.3% from 9.3 in 2016 to 11.0 in 2020. The number of firearm-related emergency department (ED) visits varied by year, with peaks in 2017 and 2020 [Figure 103]. Males consistently had higher numbers of firearm-related injury ED visits compared to females.

Age group: Youth age 15 to 24, followed by young adults age 25 to 34, had the highest rates of firearm-related injury ED visits in 2020 [Figure 104]. Older adults age 65 and older and children age 14 and younger were the least likely to be victims of firearm injuries.

Race/ethnicity: Black and Hispanic males in the County were disproportionately victims of firearm-related injuries from 2016 to 2020 [Table 11].

MORTALITY

Mortality (i.e., death) data provide a valuable measure for assessing community health status. They provide a snapshot of a community's health problems, patterns, and trends over time. Mortality data can be used to help inform public health plans and policies to prevent or reduce premature death, improve quality of life, and address health inequities.

FIGURE 105: Overall age-adjusted death rates per 10,000 population by sex, 2011-2020¹



FIGURE 106: Age adjusted overall death rates of large Counties (>1 million population), 2020²







Sources: 1. Vital Records Business Intelligence System; 2. California Community Burden of Disease Engine https://skylab.cdph.ca.gov/communityBurden/

MORTALITY

Death rates: Age-adjusted death rates control for the effects of differences in population age distributions. The age-adjusted County death rates were consistently higher for males compared to females from 2011 to 2020 [Figure 105]. Rates increased from 2011 to 2020 for both males (+6.8%) and females (+3.9%). Among large Counties with a population of at least one million, Sacramento County had the third highest death rate in 2020 [Figure 106].

Life expectancy: Life expectancy refers to the number of years a person can expect to live. Life expectancy varied by racial/ethnic group, with the longest life expectancy among Asians and the shortest among Blacks [Figure 107]. There were decreases in life expectancy from 2011 to 2020 for Hispanics (-4.1%), Blacks (-3.6%), and Asians (-2.8%).

TABLE 12: Top 10 leading causes of death by sex, 2020¹

Female	Rank	Male
Cancer	1	Heart Disease
Heart Disease	2	Cancer
Alzheimer	3	Accidents
Stroke	4	COVID-19
COVID-19	5	Stroke
Accidents	6	Diabetes
Chronic Lower Respiratory	7	Alzheimer
Diabetes	8	Chronic Lower Respiratory
Hypertension	9	Suicide
Influenza Pneumonia	10	Liver Cirrhosis

TABLE 13: Top 5 leading causes of premature death (age <75)</th>and years of potential life lost, 20201

Rank	Cause	Years of Life Lost
1	Cancer	17,594
2	Heart Disease	12,404
3	Accidents	21,080
4	COVID-19	5,450
5	Diabetes	3,825

TABLE 14: Top 3 leading causes of death by age group, 2020¹

Age	Cause 1	Cause 2	Cause 3
0-14	Accidents	Cancer	Homicide
15-24	Accidents	Homicide	Suicide
25-44	Accidents	Cancer	Suicide
45-64	Cancer	Heart Disease	Accidents
65-74	Cancer	Heart Disease	COVID-19
75+	Heart Disease	Cancer	Alzheimer

Sources: 1. Vital Records Business Intelligence System

Leading causes of death: The leading causes of death in the County in 2020 varied by sex [Table 12]. Cancer and heart disease were in the top two for females and males. Alzheimer's was the third leading cause for females, whereas accidents were third for males. During the first year of the COVID-19 pandemic, the virus already ranked within the top five leading causes of death for both sexes. Suicide and liver cirrhosis made the top ten for males but not for females.

Premature deaths: Deaths under age 75 are considered premature deaths in the United States (though some use under age 65). COVID-19 was the fourth leading cause of premature death in 2020 [Table 13]. Unlike prior years, only one of the top causes was due to non-natural manners of death (accidents). Years of potential life lost (YPLL) is another way to measure the impact of premature death.

Age group: Leading causes of death varied by age group in the County in 2020 [Table 14]. Risk of death for many chronic health conditions increase with age and were the top causes of death in the older age groups. Nonnatural manners of death constituted a higher proportion among younger persons.

TECHNICAL NOTES

Data analysis and display

Data were analyzed using Statistical Analysis Software (SAS) 9.2. Maps were created in ESRI ArcGIS 10.4. All other figures were created in Microsoft Office Excel, and tables were created within Microsoft Office Word. Figures and Tables generally display data for Sacramento County residents unless otherwise specified (e.g., State statistics).

Data sources

Multiple primary and secondary data sources were used in this report. The two most frequently used in-house data sources in this report were birth and death certificate data from the California Vital Records Business Intelligence System and reportable disease conditions from the California Reportable Disease Information Exchange (CalREDIE) system. Data sources that are derived from survey data (e.g., California Health Interview Survey) are estimates that may not be representative of the entire County. Data sources are denoted throughout the report.

Rate calculations

Rates are generally expressed in this report as the number of cases per 100,000 population, unless otherwise noted. Overall death rates are number of deaths per 10,000 population, with cause-specific deaths generally displayed per 100,000 population. Emergency department visits are expressed as number of incidents (not individuals) per 10,000. Rates are crude rates unless labeled as age-adjusted rates. Age-adjusted rates are rates that would have existed if the population under analysis had the same age distribution as the 'standard population.' The standard population used for age adjusting in this report is the United States 2000 population. Population denominators used to calculate rates were from the California Department of Finance population estimates or population projections.

Race/ethnicity data

Race and ethnicity categories used for tabulation in this report follow the Office of Management and Budget's (OMB) Standards for the Classification of Federal Data on Race and Ethnicity. Persons of Hispanic or Latino ethnicity are categorized as Hispanic/Latino regardless of race. 'Hispanic' in this report indicates Hispanic/Latino ethnicity. Non-Hispanic/non-Latino race categories include American Indian or Alaskan Native ('AI/AN'), Asian, Black or African American ('Black'), Native Hawaiian or Other Pacific Islander ('NHPI') and White. Previous standards combined the Asian and Native Hawaiian or other Pacific Islander race categories as Asian or Pacific Islander ('API'). This report uses the API category not so much for continuity with legacy data but due to frequent small numbers for health conditions of interest in the NHPI category that would lead to unstable rates and to protect individual privacy. Asian and NHPI subcategories were not explored in this report for similar reasons.

Sex, gender, and sexual orientation data

Sex designations in this report were generally based on reported sex at birth. 'Gender' in this report refers to a person's reported gender identity. Data on gender identity and sexual orientation were not available for most data sources but were included if available and robust enough to protect individual privacy (e.g., HIV data).