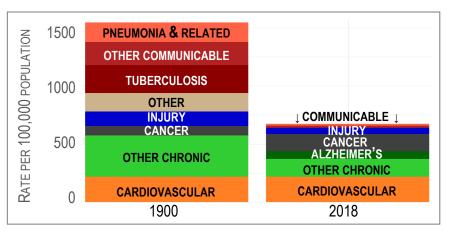


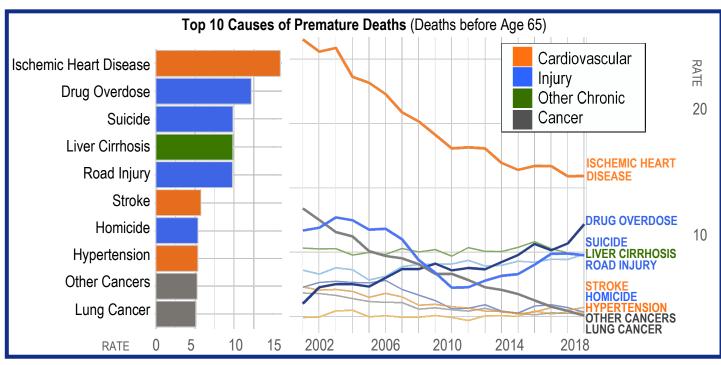
## 2020 State of Public Health Briefing Public Health Works

# Leading Causes of Death (1900–2018)

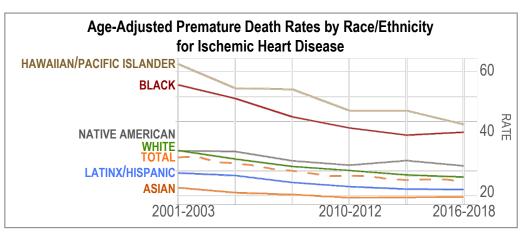
- Communicable diseases were once a leading cause of death in California.
- The percentage of deaths from communicable disease has been reduced from 39% in 1900 to 6% in 2018.



### Public Health Identifies Causes of Early Death as a Priority Opportunity for Prevention



Blacks and Native Hawaiian/Pacific Islanders are twice as likely to die from ischemic heart disease before the age of 65 compared with other race/ethnicity groups.

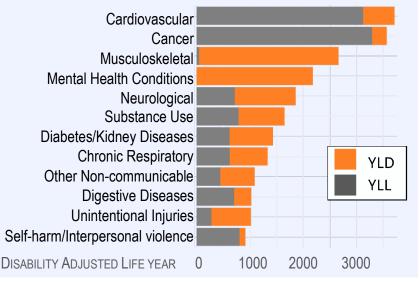


### Many Systems Influence Health and Wellbeing

### **Physical and Mental Health**

- Disability Adjusted Life Years combines, 1) number of years lost to early death and 2) years during life where people suffer poorer health due to disability.
- Mental health and musculoskeletal conditions like chronic back and neck pain are major contributors to "years lived with disability," which negatively impact quality of life.

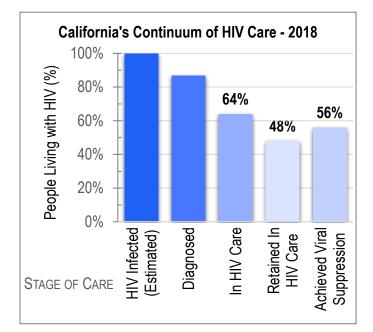
### Disability Adjusted Life Years (DALY), Years Lived with Disability (YLD), & Years of Life Lost (YLL)



### **Place Matters**

Health is powerfully shaped by community conditions. % Obese Adults 17.0% 34.09 % Population Below 100% FPL 7.7% 28.3 California Poverty Measure 12.396 24 30

### **Clinical Care & Population Health**



- Public health and health care systems work together in complementary roles.
- Individual care and treatment is provided through clinical services.
- Community level strategies extend the impact to the population as a whole.

### Understanding Health across the Lifespan

Health across the lifespan means that all Californians - from infants to older adults - are able to achieve their highest potential for health. There are a number of ways to measure health across the lifespan. The examples below provide a snapshot of the health status in California. Let's Get Healthy California – the state health assessment and improvement plan – monitors several of these measures and more at Let's Get Healthy California.

CA Birth Cohort – Infant Mortality Rate Deaths per 1,000 live births		Adverse Childhood Experiences (ACEs) % of adults who reported having experienced one or more ACE		Healthy Aging – Brain Health % of adults 65+ who reported having cognitive difficulty	
<b>4.4</b> (2015-2017)		63.5% (2015)		<b>9.8%</b> (2019)	
Rates for African-Americans are two times higher and have increased from 9.6 in 2013-2015 to 9.8 in 2015-2017.		The percentage of population having experienced four or more ACEs varies between counties, ranging from 15% to as high as 30%.		California ranks 42 <sup>nd</sup> in the nation, with a rate higher than the US average of 8.6%.	
Youth Tobacco Use % of students who reported having smoked cigarettes in the last 30 days		<b>Obesity</b> % of adults with a body mass index (BMI) of 30.0 or above		Hypertension % of adults who reported being told they have high blood pressure	
2.0%	↓	26.4%		28.4%	
(2018)		(2017)		(2019)	

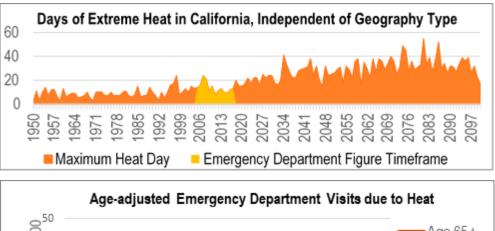
Populations with less than high Although California's rate has Despite progress, the rate for vaping/e-cigarettes has school education have higher increased, the state is better than increased from 8.6 in 2016 to obesity rates (37.8%) than those the National average (32.2%). with a college degree (18.8%).

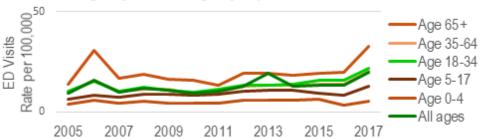
<b>Violence</b> Violent crime rate per 100,000 population		Homelessness Point in time count of the homeless population		Drug Overdose Age-adjusted death rate for drug overdose (per 100,000 people)	
<b>447.4</b> (2018)	➡	<b>151,278</b> (2019)		<b>11.4</b> (2018)	
Homicide is the second leading cause of death for young adults age 15-24.		From 2018 to 2019, homelessness in California increased by 21,306 people (16.4%) – more than the total national increase of every other state combined.		From 2008 to 2018, the rate of deaths from opioids increased from 4.8 to 5.8, and deaths from methamphetamines increased from 1.2 to 5.8.	

10.9 in 2018.

### **Climate and Health**

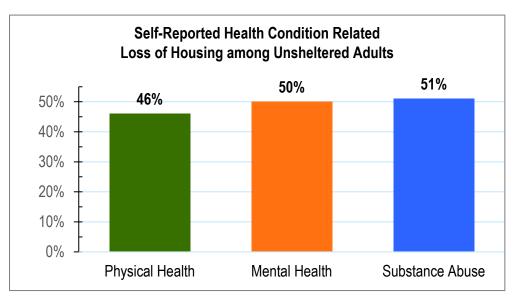
- Extreme heat in California is associated with heat-related illness.
- Some populations are particularly vulnerable such as older adults or those with existing respiratory conditions.





### **Health and Homelessness**

- About half of unsheltered adults nationally, reported physical, mental health, and substance use issues contributed to their loss of housing.
- Additional factors include but are not limited to violence, transitioning out of foster care, and former incarceration.



**Technical Notes:** This summary document is produced using a wide range of public health data resources. For data sources, methodology and limitations and to explore expanded content, visit the <u>California Department of Public Health</u> website.

### 2020 State of Public Health Briefing: Technical Notes

Public Health synthesizes data from many sources to provide information to improve population health. Information about the data sources, methodology and limitations for data presented is included below.

For an online version of this document, as well as links to additional public health data resources and expanded content, visit the <u>California Department of Public Health</u>

### PUBLIC HEALTH DATA RESOURCES

Let's Get Healthy California (LGHC) State Health Assessment and Improvement Plan

<u>California Community Burden of Disease and Cost Engine</u>: Detailed person, place and time visualizations of deaths and diseases in California

Center for Health Statistics & Informatics: County Health Status Profiles and Vital Records Data

Office of Health Equity: Portrait of Promise: <u>Statewide Plan to Promote Health and Mental Health</u> <u>Equity</u> 2020 Update

#### **KEY DEFINITIONS**

- **Age-Adjusted Death Rate:** Death rate that allows for meaningful comparisons between different groups, by controlling for differences in the age structure/distribution of each group.
- **Age-adjusted Premature Death Rate:** Age-Adjusted Death Rate among the population under 65 years of age only
- Years of Life Lost (YLL): Years of life lost due to premature mortality.\*
- Years Lived with Disability (YLD): Years of life lived with any short-term or long-term health loss.\*
- Disability Adjusted Life Year (DALY): The sum of years lost due to premature death (YLLs) and years lived with disability (YLDs). DALYs are also defined generally as years of healthy life lost.\*

(\*) Institute for Health Metrics and Evaluation. <u>Terms Defined</u>.

#### SOURCES, METHODOLOGY AND LIMITATIONS

- Shifts in Leading Causes of Death (1900 2018): 1900 data: United States Census Office. Vital Statistics; Twelfth Census of the United States, Taken in the Year 1900. Volume IV. Part II. <u>Statistics of Deaths. 1902</u>. Pages 520-523 - Table 8. 2018 data: CDPH Fusion Center analysis of: CDPH Center for Health Statistics and Informatics (CHSI) 2018 California Comprehensive Death File (CCDF, extracted 1/31/2020).
- 2) Top 10 Causes of Premature Deaths: CDPH Fusion Center analysis of: CDPH Center for Health Statistics and Informatics (CHSI) 2018 California Comprehensive Death File (CCDF, extracted 1/31/2020). Rates are age-adjusted rates for persons <65 years of age.
- 3) Age-Adjusted Premature Death Rates by Race/Ethnicity for Ischemic Heart Disease: CDPH Fusion Center analysis of: CDPH Center for Health Statistics and Informatics (CHSI) 2015-2018 California Comprehensive Death File (CCDF, extracted 1/31/2020). Race/ethnicity data are aggregated by 3-year intervals, for data de-identification purposes. All race/ethnic groups expect "Latinx/Hispanic" are non-Latinx/Hispanic.



- 4) DALY, YLD, & YLL: CDPH Fusion Center analysis of: <u>Institute for Health Metrics and</u> <u>Evaluation (IHME). GBD Compare</u>. Seattle, WA: IHME, University of Washington, 2015. Equivalent 2017 data accessed via API 7/5/2019.
- 5) Place Matters: California Poverty Measure: Public Policy Institute of California (PPIC) and Stanford Center on Poverty and Inequality (CPI). <u>California Poverty by County and Legislative</u> <u>District</u> (Counties 2012-2017). Created by PPIC on request. Federal Poverty Level: United States Census Bureau. Poverty Status in the Past 12 Months 2012-2016. <u>Population for</u> <u>whom Poverty Status is Determined</u> (County Variable S1701\_C03\_001). Accessed February 25, 2020. Adult Obesity: Robert Wood Johnson Foundation: <u>2019 County Health Rankings</u> <u>and Roadmaps: Adult Obesity</u> (2015 BRFSS). Accessed Feb 20, 2020.
- 6) Understanding Health across the Lifespan: Compares absolute value of most recent year of data with baseline value. Years referenced vary based on data availability from each source. Additional measures and statistical significance testing available at www.letsgethealthy.ca.gov.
  - i. CA Birth Cohort Infant Mortality Rate, Deaths per 1,000 live births: County Health Status Profiles CDPH Birth and Death Records (4.7 in 2013-2015 to 4.4 in 2015-2017)
  - ii. Adverse Childhood Experiences: Percent of adults reported experiencing at least one ACE: CDPH Behavioral Risk Factor Surveillance System (59.0% in 2008-2009 to 63.5% in 2015)
  - iii. Brain Health: Percent of adults 65+ who reported having cognitive difficulty: America's Health Rankings American Community Survey (10.7% in 2013 to 9.8% in 2019)
  - iv. Youth Tobacco: Percent of students reporting smoking cigarettes in the last 30 days: CDPH California Student Tobacco Survey (4.3% in 2016 to 2.0% in 2018)
  - v. Adult Obesity: Percent of adults with a body mass index (BMI) of 30.0 or above: LGHC California Health Interview Survey (22.7% in 2009 to 26.4% in 2017)
  - vi. Hypertension: Percent of adults reported being told they have high blood pressure: America's Health Rankings - Behavioral Risk Factors Surveillance Survey (27.8% in 2012 to 28.4% in 2019)
  - vii. Violence: Violent Crime Rate per 100,000 population LGHC FBI Uniform Crime Report (617.0 in 2001 to 447.4 in 2018)
  - viii. Homelessness: Point in time count: United States Department of Housing and Urban Development (HUD) and United States Interagency Council on Homelessness
  - ix. Drug Poisoning Deaths: Age-adjusted death rate for drug overdose (per 100,000 people); Includes opioids, methamphetamines and other drugs: CCB – CDPH Death Records (8.0 in 2008 to 11.4 in 2018)
- 7) Days of Extreme Heat in California, Independent of Geography Type: Cal-Adapt. <u>Extreme Heat Days & Warm Nights</u>. 2005-2020 Predictive Analysis. Maximum from GCMs HadGEM2-ES, CNRM-CM5, CanESM2,MIROC5. Accessed February 21, 2020.
- Age-Adjusted Emergency Department Visits due to Heat: Tracking California, Public Health Institute. <u>Heat Related Illness Emergency Department & Hospitalization data</u>. Accessed February, 21, 2020.
- 9) Mental Health, Substance Use, & Homelessness: Botts, J., & Levin, M. (Cal Matters; 2019, December 31). <u>California's homelessness crisis and possible solutions explained</u>. Accessed February 20, 2020; Rountree, J., Hess, N., Lyke A. (California Policy Lab; 2019 October), <u>Health Conditions Among Unsheltered Adults in the U.S.</u>, Accessed February 20, 2020.