

## Acknowledgements

The County of Santa Clara Public Health Department wishes to thank the many community stakeholders and agencies that participated in and contributed to the chronic disease prevention strategic planning process to develop the 2020-2024 Chronic Disease Prevention Strategic Plan. The department would also like to thank Resource Development Associates for facilitating the planning process and drafting this report.

# County of Santa Clara Public Health Department Internal Core Team

Bonnie Broderick, MPH, RD Nicole Coxe, MPH Angelica Diaz, MPH Jaime Flores, MPH, RD Evelyn Ho, MPH Rocio Luna, Dr.PH, MPH
Rhonda McClinton-Brown, MPH
Christina Oshinsky, MPH
Christine Rutherford-Stuart, MPH
Veena Raghavan, MPH

#### County of Santa Clara Public Health Department Branches

Communicable Disease Healthy Communities Maternal, Child, and Family Health
Office of the Director

### **Contributing Partners**

American Heart Association

California Walks

Catholic Charities of Santa Clara County

City of Palo Alto Project Safety Net City of San Jose Parks & Recreation

Community Health Partnership

County of Santa Clara Behavioral

Health Services

County of Santa Clara Department of

Environmental Health

County of Santa Clara Employee

Wellness Division

County of Santa Clara Office of Education

County of Santa Clara Social Services Agency

El Camino Hospital

FIRST 5 Santa Clara County

The Health Trust

International Children Assistance Network

Kids in Common

Roots Community Health Center-Roots Clinic

Santa Clara Valley Medical Center

Santa Clara Valley Open Space Authority

Second Harvest Food Bank

Sourcewise Community Resource Solutions

SPUR

UC Cooperative Extension

Valley Health Plan

Working Partnerships USA

Images in this report highlight the work of the Public Health Department and their efforts in the community.

# Table of Contents

Acknowledgements	ii
County of Santa Clara Public Health Department Internal Core Team	ii
County of Santa Clara Public Health Department Branches	ii
Contributing Partners	ii
Introduction	3
Problem Statement	3
Key Highlights	3
Figure 1. Public Health Framework for Reducing Health Inequities	5
Primary Prevention Approach	5
Guiding Principles	
Strategic Plan	
Strategic Plan Methodology	7
Strategic Plan Framework	
Figure 2. Health Impact Pyramid	7
Figure 3. Chronic Disease Prevention Road Map	8
Focus Area 1. Community Capacity Building	9
Focus Area 2. Healthy Environments	11
Focus Area 3. Neighborhoods That Promote Healthy Behaviors	
Focus Area 4. Clinical-Community Relationships	
Existing Public Health Work in Chronic Disease Prevention	
Emerging Issues  Conclusion	
Appendix A. Epidemiological Trends in Chronic Diseases	
Table 1. High Impact Chronic Diseases and Determinants	
Table 2. Highlighted Disparities in Chronic Diseases and Determinants	
Table 3. Worsening Trends and Emerging Issues in Chronic Diseases and Determinant Appendix B. Methodology	
Strategic Planning Activities	
Figure 4. Summary of Strategic Planning Activities	
Figure 5. Summary of Chronic Disease Prevention Priorities and Partnership Areas	
-	21
Figure 6. Cross-Cutting Approaches to Advance Health Equity in Chronic  Disease Prevention	22
Objective & Strategy Development Criteria	22
Table 4. Criteria for Prioritizing Chronic Disease Prevention Objectives & Strategies	22
Appendix C. CSCPHD Strategic Plans	23
Appendix D. Healthy Communities Branch Programs	25
References	32



## Introduction

In 2018-2019, the County of Santa Clara Public Health Department (CSCPHD) engaged a wide range of community stakeholders in the development of a 4-year strategic plan that would guide its approach to chronic disease prevention and advance health equity for all County residents. This document lays out the scope of the problem and CSCPHD's approach to this collaborative planning process.

#### **Problem Statement**

Chronic diseases are non-communicable illnesses that last one year or more and require ongoing medical attention or limit activities of daily living or both. The current landscape of chronic diseases in Santa Clara County presents both challenges and opportunities.

Overview. Santa Clara County is home to 1.9 million residents from diverse cultures and serves as a major employment center for the Bay Area region.<sup>2</sup> Although 92% of the population lives in cities, a significant portion of the county's land area is unincorporated ranch and farmland.3 Santa Clara County is expected to grow to more than 2.3 million residents by 2050, with the proportion of Hispanic and Asian population steadily increasing.4 In addition, the number of older adults is expected to double by 2050. Chronic diseases (including heart disease, cancer, stroke, and diabetes) continue to be major causes of death and disease in Santa Clara County.<sup>5</sup> Nearly half (45%) of all deaths in Santa Clara County result from just two chronic diseases cancer and heart disease.6

Chronic Disease Trends. Santa Clara County residents are generally smoking less, getting vaccinated more, practicing safe sex, and

#### **Key Highlights**

- Nearly half of all deaths are a result of cancer and heart disease.
- While some chronic disease and condition trends are improving, other trends (including obesity, diabetes, heart disease, and asthma) are worsening along with overall life expectancy.
- Nutritional intake, obesity, and low physical activity were leading behavioral risk factors for chronic disease among adults.
- Soda consumption, tobacco use, and bullying were leading behavioral risk factors for chronic disease among youth.
- Health outcomes and determinants of health vary across race and ethnicity, gender, and age groups.
- Environmental conditions, such as number of days of poor air quality are increasing, suggesting a need to examine adverse effects, especially among vulnerable populations.

having fewer teen births. While some chronic disease and condition trends are improving, other trends are worsening along with overall life expectancy.<sup>8,9,10</sup> Within the past five years, nutritional intake, obesity, and low physical activity were leading risk factors for chronic disease among adults, and soda consumption, tobacco use, and bullying were leading behavioral risk factors for chronic disease among youth. 11 Among children and youth, reports of asthma attacks among middle and high school students have increased. 12 Among adults, the rates of obesity and pre-diabetes has

worsened.<sup>13</sup> Nationwide and in Santa Clara County, obesity and type 2 diabetes rates are expected to increase.<sup>14</sup> The prevalence of high blood pressure among older adults is also expected to rise locally and nationally with the growing proportion of older adults in the population.<sup>15</sup>

**Determinants of Health Trends. The** natural and built environment are important determinants of chronic diseases and preventable injuries. Santa Clara County will need to adapt to challenges that emerge with a changing environment and growing population. Also, climate change will have health impacts and exacerbate existing health disparities in Santa Clara County.<sup>16</sup> The percent of workers traveling 30 minutes or more for work has increased, which contributes to increased carbon dioxide emissions in the environment.<sup>17</sup> There has been an increase in the number of days with poor air quality, pointing to the need to be aware of the adverse effects of poor air quality especially among vulnerable populations (such as low-income, women, children, elderly, LGBTO, and communities of color). 18 Furthermore, structural inequalities in built environments lead to institutional and neighborhood conditions that present barriers to preventing chronic conditions.

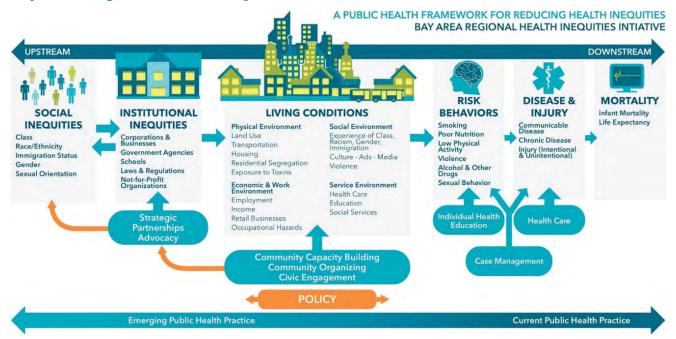
In addition to environmental changes, Santa Clara County will need to address the emerging challenges accompanying a changing population. Population growth, especially in urban areas, will affect community health, housing, jobs, commuting, and noise pollution. 19,20,21 An increasing population of older adults will pose challenges for the existing health and public health care system. 22,23,24,25,26,27,28,29,30 Gentrification and neighborhood change can impact community health outcomes, especially for vulnerable populations (such as low-income, women, children, elderly, LGBTQ, and communities of color) with

increased risk of adverse health impacts.31 Specific measures for neighborhood change and gentrification include the 10year change in number of households by neighborhood,32 gentrification measures,33 and displacement. 34,35

**Health Disparities.** Although there has been increased awareness of health disparities and County-wide efforts to address systemic inequalities, disparities continue to persist. In Santa Clara County, health outcomes and determinants of health vary across race and ethnicity, gender, and age groups. African American and Latino communities experience a disproportionately higher rate of felony arrests for violent offenses, homicide deaths, diabetes-related ER visits, obesity, and death before age 75.36,37,38,39,40,41,42,43 African American and Latino communities also experience disadvantages related to the social determinants of health, including educational attainment, poverty, and food insecurity leading to the utilization of food banks or food pantries. 44,45,46 Overall, worsening income inequality affects the health and well-being of communities and the nation, and can further exacerbate existing health disparities. 47,48 There has been an increase in the percentage of adults reporting needing to see a doctor but not being able to because of cost. 49 Achieving health equity requires an upstream and downstream approach towards addressing unequal conditions that shape chronic diseases and preventable injuries (Figure 1).

Additional Santa Clara County chronic disease data are available in Appendix A and in the CSCPHD open data portal at https://data-sccphd.opendata.arcgis.com.

Figure 1. Public Health Framework for Reducing Health Inequities. 50 Bay Area Regional Health Inequities Initiative.



Credit: Public Health Framework for Reducing Health Inequities Infographic developed by the Bay Area Regional Health Inequities Initiative (BARHII).

#### **Primary Prevention Approach**

The County of Santa Clara is committed to preventing chronic diseases for all residents. Recent success in large-scale public health interventions to reduce tobacco use and obesity clearly demonstrates that a comprehensive, coordinated, and community-focused primary prevention approach is far more effective than clinical interventions alone. These successes are in part due to an increased focus on policy, systems, and environmental change approaches that go beyond programming and into the processes, workflows, policies, infrastructure, and physical environment.

The Bay Area Regional Health Inequities Initiative (BARHII) is a conceptual framework that outlines an approach to public health practice with a focus on broader, upstream factors that address social inequalities impacting the health of communities and populations. The framework moves from clinical and individual-based interventions to broad neighborhood, environmental, and

social strategies, coupled with capacitybuilding, strategic partnerships, and policy changes aimed to achieve large-scale health outcomes. This framework recognizes that conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. These conditions are known as social determinants of health (SDOH). It is known that poverty limits access to healthy foods and safe neighborhoods and that more education is a predictor of better health. It is also known that differences in health are striking in communities with poor SDOH such as unstable housing, low-income, unsafe neighborhoods, or substandard education. By applying what we know about SDOH, we can not only improve individual and population health but also advance health equity. The BARHII model is used as a decision-making framework for the County of Santa Clara Public Health Department's prevention work towards health equity for all residents.

Changing community norms, environments, policies, and practices is especially powerful in communities where many factors limit the ability to make healthy choices. The long-term effects of historical inequality still play a significant role in all aspects of health and well-being. Equity demands just and fair inclusion into a society in which all can participate, prosper, and reach their full potential. This requires the equitable distribution of resources and broad recognition of systematic barriers facing impacted communities.

#### **Guiding Principles**

CSCPHD grounded its 2018-2019 chronic disease prevention strategic planning process in several guiding principles. These principles also reflect the environmental scan findings of this strategic planning process, which captures how CSCPHD and other public health departments across the nation are broadening their work beyond primary prevention to include more crosscutting approaches.

Decisions, processes, and strategies:

- Are data driven
- Are prevention focused without excluding treatment
- Are grounded in best and promising practices
- Prioritize health equity, with a focus on historically marginalized communities or subpopulations that experience a disproportionate burden of disease
- Take into account the policy, systems, and environmental changes necessary to sustain long-term impacts of chronic disease prevention
- Foster and recognize collaborative community and government partnerships as essential to achieving outcomes
- Are intended to reach a high number of people
- Address the life span while emphasizing upstream approaches
- Reach beyond CSCPHD's current efforts
- Have a measurable impact in the next 4 years
- Lead to sustained influence on multiple health indicators or risk factors



# Strategic Plan

#### Strategic Plan Methodology

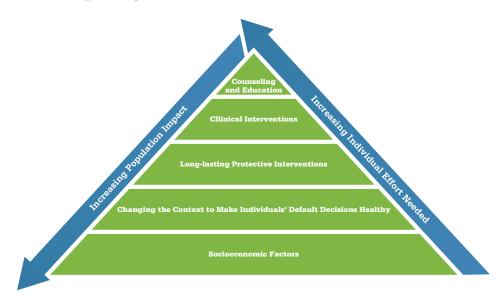
The 2020-2024 CSCPHD Chronic Disease Prevention Strategic Plan was developed through a collaborative effort between key CSCPHD stakeholders and a range of community agency partners. The core CSCPHD team driving the strategic planning process engaged representatives from community-based organizations, health clinics, health plans, hospitals, and other County departments. Resource Development Associates (RDA), a consulting firm, provided critical guidance, coordination, research, and facilitation support to this core CSCPHD team.

Please see appendix B for more details about the strategic plan methodology.

#### Strategic Plan Framework

The 2020-2024 CSCPHD Chronic Disease Prevention Strategic Plan framework is based on Tom Friedan's public health impact pyramid. The 5-tier pyramid describes the impact of different types of public health interventions and provides a framework to improve health (Figure 2).51 This chronic disease prevention strategic plan flips the pyramid framework to prioritize the importance of addressing social determinants of health and broader interventions over narrower ones. In particular the plan focuses on the middle three levels of the public health impact pyramid moving from Healthy Environments to Neighborhoods that Promote Healthy Behaviors to Clinical-Community Relationships. The cross-cutting themes of community capacity-building and equity span all three levels (Figure 3). The road map highlighted in Figure 3 includes a summary of focus areas, goals, and objectives. The full 2020-2024 Chronic Disease Prevention Strategic Plan follows.

Figure 2. Health Impact Pyramid<sup>53</sup>



## **VISION** All people thrive in healthy and safe communities MISSION To protect and improve the health of our community

## STRATEGIC GUIDING PRINCIPLES

- Data-driven
- Best practices
- Racial and health equity
- Policy, systems, and environmental changes
- Community and government partnerships
- Preventionfocused
- Life span
- Upstream

# 11111 **SOCIAL DETERMINANTS of HEALTH**

# HEALTHY ENVIRONMENTS

All residents live in communities designed to enhance health and prevent chronic diseases.



- Promote land use, urban design, and transportation policies that create healthy built environments, promote equity, and prevent chronic diseases in areas and communities that are disproportionately affected
- Promote chronic disease prevention policy and systems changes that address climate change and build resilience in the most impacted communities.

## NEIGHBORHOODS THAT PROMOTE **HEALTHY BEHAVIORS**

All neighborhoods are tobacco and violence free and residents have access to healthy foods, beverages, parks, and public spaces.



#### In all neighborhoods:

- Increase access to healthy and affordable foods.
- Decrease access to and discourage consumption of unhealthy foods and beverages.
- Develop a cadre of youth leaders with knowledge and skills to engage in education, policy, and systems changes to address tobacco use and chronic disease prevention.
- Promote access to safe and healthy neighborhood places to prevent chronic diseases
- Integrate a violence prevention perspective into neighborhood-based chronic disease prevention efforts.

## CLINICAL COMMUNIT

All residents have equitable access to high-quality chronic disease prevention services and resources.



- Integrate chronic disease prevention practices into Santa Clara County safety net healthcare systems.
- Link community-based and safety net healthcare systems to prevent chronic diseases.
- Enhance public education and awareness among populations most at risk for or living with chronic

#### **FOCUS AREA 1**

## Community Capacity Building

**GOAL:** All residents, partners, and local jurisdictions have the capacity to effectively address chronic disease prevention.

#### Rationale

Community capacity building and equity are critical cross-cutting themes to effectively address the social determinants of health in chronic disease prevention. In order to achieve equitable health outcomes, the underlying social determinants of inequity must be addressed. Addressing these determinants will require new and improved public policy, a shift in the way resources are allocated, and challenging the status quo. To do so, partners, policymakers, and members of affected communities and their allies will need to build their knowledge, skills, and capacities for advocacy in ways that enable collective action around shared values.

In Santa Clara County, approximately 40% of adults and 79% of older adults (65+) have high blood pressure, high blood cholesterol or diabetes. For people of color, the rates are higher. African American and Latino communities experience a disproportionately high rate of homicide deaths, diabetesrelated ER visits, obesity, housing cost burden, and death before age 75. County residents with higher incomes are more likely to live longer, healthier lives. Those with lower incomes have poorer overall health as well as higher rates of obesity and smoking. Building capacity of residents and local community-based organizations combined with partnerships with local government jurisdictions, businesses, and health care systems provides the greatest promise for sustained changes

in environments, policies, systems, and practices required to prevent and mitigate the effects of chronic disease.

#### **Objective 1.1**

Leverage strategic partnerships to more effectively prevent chronic diseases within populations with the highest health inequities.

- Strategy 1.1.a: Establish new and strengthen existing strategic partnerships with community stakeholders serving populations with the highest health inequities.
- Strategy 1.1.b: Identify and support strategic partners and residents, including youth, to build their internal capacity to lead chronic disease prevention interventions and efforts to advance equity in the prevention of chronic diseases.
- Strategy 1.1.c: Engage neighborhoods and individuals to create opportunities to impact health and mobilize policy, systems, or environmental changes related to chronic conditions.
- Strategy 1.1d: Work with jurisdictional partners (i.e., cities, County) to develop, adopt, and implement chronic disease prevention policies and practice changes.



#### FOCUS AREA 2

## Healthy Environments

**GOAL:** All residents live in communities designed to enhance health and prevent chronic diseases.

#### Rationale

Chronic diseases are linked to the ways our communities are designed. Choices around the management of land growth, land use, and development of the built environment all strongly influence the health and wellbeing of residents. The mix, types, and proximity of uses (e.g., stores, restaurants, workplaces, residences, parks, public spaces, and agriculture), the safety of playgrounds and pedestrian walkways, and the layout and location of neighborhoods all affect residents' physical activity levels, access to nutritious foods, social connectedness, and enjoyment of their surroundings. Land use and urban design also affect exposure to pollutants and noise, public safety, and other adverse health impacts. In highly automobile-dependent communities, people are more likely to have health conditions related to sedentary behavior, including obesity and type 2 diabetes, and the environment experiences higher greenhouse gas emissions, which leads to global warming. Additionally, climate change threatens public health and basic human life support systems such as water, air, and soil quality, food, shelter, and security.

Cities and counties can encourage healthier environments and behaviors by promoting policies that create walkable and bikeable areas with a diverse mix of uses; green streetscapes and short blocks with safe crossings; higher population and employment densities in strategic areas; job and housing concentrations that make transit use viable; and a mix and affordability of housing for all incomes. Effectively addressing the sensitivities, vulnerabilities, and adaptabilities associated with climate change can also build resilience in the most impacted communities.

#### **Objective 2.1**

Promote land use, urban design, and transportation policies that create healthy built environments, promote equity, and prevent chronic diseases in areas and communities that are disproportionately affected by poor health.

- Strategy 2.1.a: Advocate for innovative land use and urban design policies that promote health and safety in areas where there are historical inequities in land use choices.
- Strategy 2.1.b: Advance safe, active, and alternative transportation (e.g., walk, bike, transit, ride share, electric vehicles) for all ages in communities most impacted.
- Strategy 2.1.c: Facilitate the adoption of jurisdictional Vision Zero (zero trafficrelated deaths) policies throughout the County.

### **Objective 2.2**

Promote chronic disease prevention policy and systems changes that address climate change and build resilience in the most impacted communities. • Strategy 2.2.a: Engage and educate cities, the County, and the public to prepare and adapt local systems to address the health and equity impacts of climate change.



#### FOCUS AREA 3

# Neighborhoods That Promote Healthy Behaviors

**GOAL:** All neighborhoods are tobacco and violence-free and residents have access to healthy foods, beverages, parks, and public spaces.

#### Rationale

Where we live, work, play, and learn shapes individual health and well-being. People who live in neighborhoods that promote physical activity, access to healthy food and beverages, and tobacco-free environments make healthier choices and live longer. Place-based primary prevention focuses on creating healthy and safe places that reduce the chances of people becoming sick, especially in neighborhoods with the highest inequalities.

The availability of parks and public spaces that are safe and accessible increases physical activity, facilitates strong social connections, relieves stress, and helps people recover more quickly from illness and trauma. When people feel safe in their own communities, they are more likely to use local parks, access public transportation, walk to the grocery store, or let their children play outside. When communities experience violence and trauma, it damages community cohesion, and it triggers individual trauma. For some communities, this results in poor health outcomes. Addressing the underlying conditions in neighborhoods prevents violence and trauma at both the individual and community levels, making communities stronger and more resilient.

When unhealthy food and products such as alcohol, tobacco, and sugary beverages are easily accessible and widely promoted, residents, especially youth, are more likely to purchase them and to suffer major preventable health consequences over time such as overweight, obesity, heart disease, and type 2 diabetes. Not having access to enough nutritious food, also known as food insecurity, further contributes to health disparities, especially among young adults, college students, and vulnerable populations. Restricting access to unhealthy products and increasing availability and affordability of healthier foods and beverages support youth and adults to make healthier choices in their neighborhoods, particularly in those areas disproportionately affected by inequities.

#### **Objective 3.1**

Increase access to healthy and affordable foods in all neighborhoods.

- Strategy 3.1.a: Expand the adoption, implementation, and improvement of practices and policies that make healthy foods and beverages more accessible and affordable in neighborhoods that are the most impacted.
- **Strategy 3.1.b:** Decrease food insecurity among young adults ages 18-24.

#### **Objective 3.2**

Decrease access to and discourage consumption of unhealthy foods and beverages in all neighborhoods.

• Strategy 3.2.a: Expand the adoption, implementation, and improvement of practices and policies that decrease access to unhealthy foods and beverages.

#### Objective 3.3

Develop a cadre of youth leaders with knowledge and skills to engage in education, policy, and system changes addressing tobacco use and chronic disease prevention.

- **Strategy 3.3.a:** Develop youth leaders and engage them in policy activities to decrease the disproportionate use of and access to tobacco products.
- Strategy 3.3.b: Develop youth leaders and engage them in education, policy, and systems change activities to decrease the disproportionate prevalence of chronic disease.

#### **Objective 3.4**

Promote access to safe and healthy neighborhood places to prevent chronic diseases.

 Strategy 3.4.a: Preserve and enhance access to and utilization of public spaces and parks with a focus on high-need neighborhoods.

#### Objective 3.5

Integrate a violence prevention perspective into neighborhood-based chronic disease prevention efforts.

- **Strategy 3.5.a:** Link violence prevention strategies to healthy eating, active living, and tobacco-free activities with a focus on high-need neighborhoods.
- Strategy 3.5.b: Coordinate safe and peaceful neighborhood action planning to build resident empowerment in city neighborhoods most impacted by violence.



## Clinical-Community Relationships

**GOAL:** All residents have equitable access to high-quality chronic disease prevention services and resources.

#### Rationale

Populations disproportionally impacted by a lack of access to quality and culturally appropriate health care services are particularly at risk for adverse impacts from chronic conditions. In 2012, Santa Clara County developed a report using 2009 Centers for Medicare and Medicaid Services (CMS) annual expenditure data and 2011-2012 California Health Interview Survey (CHIS) data to estimate the cost of 6 chronic diseases – arthritis, asthma, cardiovascular disease, diabetes, cancer and depression. They found that Santa Clara County residents spent an estimated 44% of total health care expenditure on these 6 conditions (almost \$4 billion). It is imperative that healthcare systems prioritize a comprehensive approach to chronic disease prevention at the clinical level to identify and address risk factors before they manifest into chronic disease. Strategies that connect community-led interventions and prevention programs with clinical services help ensure that people with or at high risk of chronic diseases have access to the resources they need to prevent or manage these diseases and address the health of the whole person. These strategies can improve quality of life, delay the onset or progression of disease, avoid complications, and reduce the need for more and higher cost health care. Public education and awareness campaigns about chronic disease prevention can also help people understand warning signs and risk factors and recognize the need to seek medical care.

#### **Objective 4.1**

Integrate chronic disease prevention practices into Santa Clara County safety net healthcare systems.

- Strategy 4.1.a: Facilitate the adoption of a community Rx screening and referral system within safety net clinics.
- **Strategy 4.1.b:** Facilitate the adoption of an HHS-wide screening and referral system for pre-diabetes.
- Strategy 4.1.c: Evaluate current standards of care and reduce barriers to tobacco behavior change among populations with the highest rates of tobacco use.

### Objective 4.2

Link community-based and safety net healthcare systems to prevent chronic diseases.

 Strategy 4.2.a: Identify, map, and prioritize effective community-based chronic disease prevention services and resources.

#### Objective 4.3

Enhance public education and awareness among populations most at risk for or living with chronic diseases.

• Strategy 4.3a: Develop culturally specific chronic disease prevention public awareness campaigns to increase participation in community-based prevention efforts and health care diagnostic and prevention services.

# Existing Public Health Work in Chronic Disease Prevention

This plan focuses on objectives and strategies that uniquely contribute to chronic disease prevention. Other Public Health Department strategic plans and grant-funded initiatives either exist or are well underway that address additional prevention priorities. Please see Appendices C & D for details about current CSCPHD programs and other CSCPHD strategic plans.

## **Emerging Issues**

This plan also calls out emerging trends in response to several rapidly shifting indicators in Santa Clara County. Alzheimer's disease, asthma, alcohol and marijuana use, exposure to environmental toxins and opioid addiction and related deaths are six rapidly changing trends that will require surveillance and review to disentangle their complexities. Through further monitoring and evaluation and through collaboration with County Departments and other community partners leading these emerging issues, CSCPHD will define its unique role in addressing these indicators and improving the associated health outcomes.

## Conclusion

CSCPHD will continue to collaborate with community stakeholders, and will more broadly engage the general public, to effectively promote and implement the 2020-2024 CSCPHD Chronic Disease Prevention Strategic Plan. Development of an implementation plan and evaluation framework will further ensure that the plan remains relevant, dynamic, and responsive to CSCPHD needs while advancing health and equity for all Santa Clara County residents.





# Epidemiological Trends in Chronic Diseases

**Table 1.** High Impact Chronic Diseases and Determinants

		SCC	Race/ethnicity			
	Measure	Total Population	White, NH	African American	Asian/ PI	Latino
	Percentage of adults who are obese <sup>55</sup>	20	23	26	8	33
	Percentage of middle and high school students who are obese <sup>56</sup>	14	11	14	8	20
	Percentage of children ages 2 to less than 5 years who are obese <sup>57</sup>	18	16	-	14 (Asian only)	18
	Percentage of adults diagnosed with diabetes <sup>58</sup>	8	8	10	6	11
	Percentage of adults diagnosed with pre-diabetes <sup>59</sup>	14	14	19	12	18
	Percentage of adults ever diagnosed with asthma <sup>60</sup>	14	16	19	11	15
dicators	Percentage of middle and high school students who had an asthma attack in the last 12 months <sup>61</sup>	10	11	16	10	10
tus In	Percentage of adults diagnosed with high blood pressure <sup>62</sup>	27	33	40	19	27
Health Status Indicators	Percentage of adults reporting one or more days in past 30 days when their mental health was not good <sup>63</sup>	37	39	48	34	39
	Percentage of adults ages 45 years and older who fell at least once in the past 3 months <sup>64</sup>	15	17	10	8	17
	Percentage of deaths due to malignant neoplasms (cancer) <sup>65</sup>	24	23	25	28	24
	Percentage of deaths due to heart disease <sup>66</sup>	21	23	23	18	17
	Percentage of middle and high school students who were physically active at least 60 minutes a day for the past 7 days <sup>67</sup>	19	28	20	16	18
	Percentage of middle and high school students who drank sweetened fruit drinks, sports or energy drinks at least one time in past 24 hours $^{88}$	52	42	60	46	60
cators	Percentage of adults who needed to see a doctor in the past 12 months but could not because of $cost^Eg$	11	8	-	8	20
	Percentage of renter-occupied housing units that pay $30\%$ or more of household income as gross $\text{rent}^{70}$	47	45	57	39	60
Ith Inc	Average cost of a market basket of nutritious food items relative to income <sup>71</sup>	0.19	0.12	0.20	0.16 (Asian only)	0.28
if Hea	Percentage of workers 16 years and over whose travel time to work is 30 minutes or $more^{72}$	46	_	_	_	-
Social Determinant of Health Indicators	Percentage of adults who had emotional symptoms as a result of treatment based on their race in the past $30~\rm days^{73}$	7	5	11	6	10
	Percentage of middle and high school students who were bullied because of race/ethnicity/national origin on school property in the past 12 months <sup>74</sup>	16	12	35	18	15
	Number of days in year exceeding ambient standards for criteria pollutants (ozone and PM2.5) <sup>75</sup>	8-hour Ozone Averages: 5 days above national standard and 5 days above state standard; Daily 24 hours PM 2.5 averages: 9 days above national standard				
	Diesel particulate matter	21 particles of diesel emissions per cubic meter of air			ir	

Table 2. Highlighted Disparities in Chronic Diseases and Determinants

		SCC		Race/	ethnicity	
	Measure	Total Population	White, NH	African American	Asian/ PI	Latino
	Percentage of adults who are obese <sup>76</sup>		23	26	8	33
	Rate of diabetes-related ER visits among adults ages 18 and older per 100,000 adults <sup>77</sup>	199.8	144.1	727	64.8	445.9
Health Status Indicators	Age-adjusted rate of emergency department visits due to fall per 100,000 people ages 65 years and older <sup>78</sup>	3469.6	3945.8	2998.5	1904.4	3823.4
	Percentage of adults who have permanently lost one or more teeth due to gum disease or tooth decay <sup>79</sup>	45	31	50	61	60
ı Stai	Age-adjusted rate of deaths from Alzheimer's disease per 100,000 people <sup>80</sup>	8.8	10.1	23.8	5.9	6.2
lealth	Age-adjusted rate of opioid overdose deaths per 100,000 people <sup>81</sup>	3.2	6.2	3.9	0.5	2.2
	Age-adjusted rate of homicide deaths per 100,000 people <sup>82</sup>	2.8	1.5	7.5	1.4	4.9
	Rate of adult felony arrests for violent offenses per 1,000 adults <sup>83</sup>	7	5	32.9	2.4	13.6
	Percentage of deaths occurring before age 75 <sup>84</sup>	38	32	62	40	54
	Percentage of adults ages 25 and over with less than high school education <sup>85</sup>	12	3	8	10	30
dicat	Homeless population count <sup>86</sup>	7,394	-	14	23	44
lth In	Percentage of people living below poverty level (100% FPL) <sup>87</sup>	7	5	12	7 (Asian only)	11
Social Determinant of Health Indicators	Percentage of adults who needed to see a doctor in the past 12 months but could not because of cost <sup>88</sup>	11	8	_	8	20
	Percentage of adults who used food bank or pantry in the past 12 months <sup>89</sup>	11	4	16	9	25
	Percentage of middle and high school students who were bullied because of race/ethnicity/national origin on school property in the past 12 months <sup>90</sup>	16	12	35	18	15
S =	Percentage of adults who report their neighborhoods are safe <sup>91</sup>	58	64	63	63	39

**Table 3.** Worsening Trends and Emerging Issues in Chronic Diseases and Determinants

		SCC		Race/	ethnicity	
	Measure	Total Population	White, NH	African American	Asian/ PI	Latino
	Percentage of adults diagnosed with pre-diabetes <sup>92</sup>	14	14	19	12	18
	Percentage of middle and high school students who used e-cigarettes in the past $30~{\rm days^{93}}$	6	6	7	4	9
itors	Age-adjusted rate of hospitalizations due to fall per 100,000 people ages 65 years and older <sup>94</sup>	1461.7	1696.2	1180.7	940.7	1276.8
ndica	Age-adjusted rate of hospitalizations due to opioid overdose per 100,000 people <sup>95</sup>	4.1	7.2	6	1.1 (Asian only)	3.4
atus	Age-adjusted rate of deaths from Alzheimer's disease per 100,000 people <sup>96</sup>	8.8	10.1	23.8	5.9	6.2
Health Status Indicators	Percentage of deaths due to accidental (unintentional) injury <sup>97</sup>	5	4	7	4	7
Heal	Age-adjusted rate of pedestrian deaths per 100,000 people (traffic and non-traffic) <sup>98</sup>	2.4	1.3	-	1.8	3
	Life expectancy at birth (years) <sup>99</sup>	82.3	82	75.7	84.3	81
	Percentage of middle and high school students who used marijuana at least once in their lifetime <sup>100</sup>	15	13	24	7	22
	Homeless population count	7,394	-	14	23	44
nant ( ators	Percentage of workers 16 years and over whose travel time to work is 30 minutes or more <sup>101</sup>	46	-	-	-	-
Social Determinant of Health Indicators	Percentage of adults who needed to see a doctor in the past 12 months but could not because of cost <sup>102</sup>	11	8	_	8	20
	Number of days in year exceeding ambient standards for criteria pollutants (ozone and PM2.5) <sup>103</sup>	8-hour Ozone Averages: 5 days above national standard and 5 days above state standard; Daily 24 hours PM 2.5 averages: 9 days above national standard				
	Traffic Density <sup>104</sup>	Sum of traffic volumes adjusted by road segment: 950 vehicle-kilometers per hour per total road length				



### APPENDIX B.

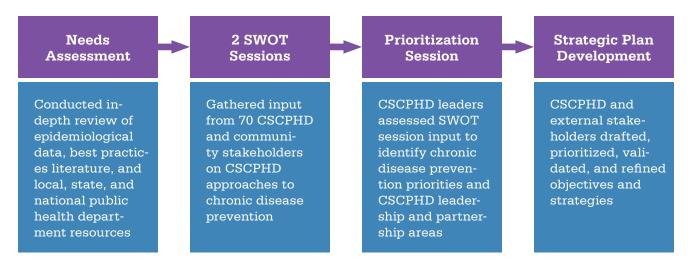
## Methodology

The 2020-2024 CSCPHD Chronic Disease Prevention Strategic Plan was developed through a collaborative effort between key CSCPHD stakeholders and a range of community agency partners. The core CSCPHD team driving the strategic planning process engaged representatives from community-based organizations, health clinics, health plans, hospitals, and other County departments. Resource Development Associates (RDA), a consulting firm, provided critical guidance, coordination, research, and facilitation support to this core CSCPHD team.

#### **Strategic Planning Activities**

The results of RDA's research laid the foundation for a series of internal and external strategic planning meetings that informed strategic plan development. These activities are summarized in Figure 4.

Figure 4. Summary of Strategic Planning Activities



The strategic planning process began with a robust needs assessment that focused on gaps in CSCPHD chronic disease program areas and emerging public health strategies not directly related to existing program areas. RDA and CSCPHD then presented the needs assessment findings at two Strengths, Weaknesses, Opportunities, and Threats (SWOT) session discussions. SWOT session participants reflected on the findings to identify strengths, gaps, and opportunities in CSCPHD's approach to chronic disease prevention as well as emerging chronic disease threats. The core team distilled these SWOT session findings into four themes: 1) chronic diseases and risk factors, 2) cross-cutting approaches to address chronic diseases, 3) external factors with limited CSCPHD influence, and 4) opportunities for CSCPHD operations improvement. In the prioritization session that followed, CSCPHD leaders assessed the findings in the first of these four categories to identify critical chronic disease prevention priorities that CSCPHD will lead and key areas they will partner on (Figure 5). They also narrowed the second of the four categories to key cross-cutting approaches to advance health equity in chronic disease prevention (Figure 6).

During the three strategic planning sessions that followed, CSCPHD and community stakeholders drafted, prioritized, validated, and refined objectives and strategies reflecting the chronic disease prevention priorities identified in prior strategic planning activities.

Figure 5. Summary of Chronic Disease Prevention Priorities and Partnership Areas

#### Chronic Disease Prevention Lead Priorities

(CSCPHD will lead)

- Obesity, cardiovascular conditions, and pre-diabetes
- Active and safe transportation, and parks and open space
- Physical activity
- Nutrition, food security
- Tobacco-free communities
- Healthy aging
- Community violence prevention
- Oral health

#### Chronic Disease Prevention Partnership Areas

(CSCPHD will partner on)

- Climate change
- Healthcare integration
- Healthy neighborhood design
- Food systems
- Healthy housing
- Mental health, substance abuse, trauma

Figure 6. Cross-Cutting Approaches to Advance Health Equity in Chronic Disease Prevention

#### **Cross-Cutting Approaches**

- Policy
- Systems change
- Environmental change
- Community engagement, community organizing, and direct community participation

#### **Objective & Strategy Development Criteria**

During the prioritization and strategic planning sessions, CSCPHD and community stakeholders used the following criteria to identify and prioritize chronic disease prevention objectives and strategies.

Table 4. Criteria for Prioritizing Chronic Disease Prevention Objectives & Strategies

Criteria	Definition
	Does the strategy:
	• Reach a high number of people?
Lligh Import	• Reach populations with the highest burden of chronic diseases?
High Impact	Make a lasting impact and is it sustainable?
	• Have broad scope that influences policies, systems, and environments?
	Have impact on multiple health outcomes or risk factor?
Feasibility	Can CSCPHD impact the strategy significantly in the next 3 years?
Best Practices/Evidence-Based	Do evidence-based interventions or promising practices exist to support pursuit of this strategy?
Relevance	Does the strategy align with or expand on CDIP, HCB, and CSCPHD priorities or initiatives?
Equity	Does the strategy help address a disproportionate burden of disease or risk among priority subpopulations or among historically disadvantaged communities?
Measurability	Will CSCPHD be able to have a measurable impact on the strategy?
PHD Role	Is there a clearly defined role for CSCPHD in implementing this strategy?



# **CSCPHD Strategic Plans**

County of Santa Clara Public Health Department Strategic Plan – The mission of the County of Santa Clara Public Health Department is to protect and improve the health of the community so that all people thrive in healthy and safe communities. The 2019-2022 strategic plan strengthens the department's foundational capabilities to work in new ways with new partners to deepen their impact. The five priority areas the Public Health Department will focus its efforts on are: racial and health equity, policy, partnerships, technology and data, and workforce development and engagement.

Advancing Health Equity in Tobacco Control – The 2018-2022 Strategic Plan for Advancing Health Equity in Tobacco Control in Santa Clara County provides a five-year road map for the Santa Clara County Tobacco-Free Communities Program to reduce the impact of tobacco among our most vulnerable populations. It serves as a guide for organizational practices and program priorities, and sets five-year outcomes and benchmarks.

**Health & Hospital System Roadmap** – The County of Santa Clara Health and Hospital System Strategic Road Map centers on improving patient health outcomes while strengthening customer experience. The Road Map places an explicit focus on reducing redundancies, delays, and cost of care.

Getting to Zero Plan – Despite low HIV incidence compared to the national average, new diagnoses continue to rise among sub-populations countywide, leading to worsening disparities affecting people of color and sexual and gender minorities. STD/HIV Prevention prioritizes Getting to Zero for new HIV cases, HIV-related deaths, and stigma. The STD/HIV program uses collective impact to increase access to preventive medication, promote evidence-based STD screening practices and improve linkages to care for those living with HIV.

Oral Health Plan – The Oral Health Strategic Plan aims to increase access to and utilization of high-quality, culturally-appropriate oral health preventive services for all county residents with an eye to combating persistent racial and socioeconomic disparities. Focus areas over the next four years include access to dental services, oral health education, dental-medical service integration, workforce expansion, policy, and data.

Maternal, Child & Adolescent Health (MCAH) Program – The MCAH program is currently undergoing a community needs assessment and strategic planning process to set priorities for the next five years, addressing core needs of women, infants, children, and adolescents in Santa Clara County. Priority areas of this plan include: improving access to adequate and culturally responsive pre/postnatal care, improving health care utilization rates, decreasing infant mortality, and improving access to mental health services.

The Children's Health Improvement Plan – In 2018, the Public Health Department was charged with coordinating a network of County departments and partner agencies to implement strategies that improve the health and well-being of children, youth and families in Santa Clara County. This plan represents the collective efforts of a broad network of community agencies and organizations with a focus on leveraging current plans, resources and partnerships and elevating policy and systems strategies to improve outcomes. To impact the social determinants of health that affect the health outcomes of children in our county, the plan focuses on seven priority areas: (1) Address structural and institutional racism, discrimination, harassment, and biases across systems, (2) Access to quality dental and health services, (3) Food security, (4) Housing, (5) Quality universal preschool and child care, (6) Universal screening, and (7) Violence and bullying prevention.





# Healthy Communities Branch Programs

The goals of CSCPHD's Healthy Communities Branch (HCB) are to prevent chronic disease and injury and create environments that promote and protect the community's health. A list of currently active HCB programs follows.

#### **Active and Safe Communities**

The mission of Active and Safe Communities is to improve the health and safety of all residents and the work force in Santa Clara County by increasing opportunities for physical activity in safe environments and by promoting alternative transportation such as walking, bicycling, transit use, and carpooling. Co-benefits include improving air quality, mental health, safety, and social cohesion. Primary activities include:

- Healthy Transportation and Land Use Collaborate with community, County and city staff, and elected officials to develop plans and policies to increase active transportation and accessible streets for all users.
- Traffic Safe Communities Network (TSCN) Engage community partners to decrease traffic-related injuries and promote active forms of transportation such as walking and bicycling.
- Park Initiatives Promote park and trail use for physical activity including a clinic-to-community Parks Prescription Initiative designed to promote access to and utilization of parks and trails to improve health.
- Safe Routes to School Promote walking and biking to school in a safe and healthy environment in partnership with law enforcement, engineering, school districts, parents, and city staff. Currently active in Gilroy.
- **Traffic Demand Management** Collaborate with County departments to increase staff engagement in alternative and active modes of transportation to commute to work.

#### **CalFresh Healthy Living**

The mission of the CalFresh Healthy Living Program is to prevent nutrition- and activity-related chronic diseases and to improve food security among those eligible for Supplemental Nutrition Assistance Program Education (SNAP-Ed). The program focuses on implementing four policy, systems, and environmental (PSE) change strategies: 1) increase access to, and consumption of, healthy food; 2) increase affordability of healthy food; 3) reduce access to, and consumption of, unhealthy food and beverages; and 4) increase opportunities for physical activity by decreasing sedentary behavior. Primary activities include:

- Nutrition Standards in Schools, Afterschool, and Early Childhood Settings Strengthen or improve implementation of existing school wellness policies and/or practices through nutrition education and partnerships with school wellness committees, student and parent action groups.
- **Smarter Lunchroom Initiative** Implement placement, promotion, and product strategies that nudge students to select the healthiest food in the lunchroom.
- Community Retail Partnerships Promote pricing discounts to encourage use of CalFresh and Market Match dollars at Farmers' Markets and Double-Up Food Buck dollars at participating stores to increase access and affordability of fruits and vegetables.
- Physical Activity Access Expand access to safe places to walk and bike through the
  open streets model, increase opportunities for physical activity through Parks Prescription
  partnership, and create opportunities for daily physical activity at early-childhood and youthserving organizations.
- Healthy Hospital Food Venues Support implementation of Santa Clara County nutrition standards and healthier food product promotion strategies in hospital cafeteria and café settings.



#### **Nutrition and Wellbeing**

The mission of the Nutrition and Wellbeing team is to ensure access to healthy affordable food, support healthy food systems, and prevent chronic diseases through upstream strategic collaboration, evidence- based programming, and community mobilization.

- The Childhood Feeding Collaborative Provide information and training to healthcare providers, community-based organizations, and early childhood programs to help caregivers learn feeding practices that support children in becoming happy, healthy eaters.
- **County Jail Inspections** Monitor compliance of nutrition standards, medically ordered diets, and healthy food service principles for custodial populations & staff.
- **Healthy Food Systems** Collaborate with the Food Systems Alliance, community-based organizations, and county departments on creating a climate-friendly local food system that provides affordable, healthy foods to county residents.
- Young Adult Food Security Collaborate with educational institutions and the foster care system to address food insecurity among young adults and transition-age foster youth.

#### Clinic-to-Community Linkages / Diabetes Prevention

The mission of Clinic-to-Community Linkages / Diabetes Prevention Initiative is to provide chronic disease prevention education in the community and integrate chronic disease prevention best practices into health care settings. Primary activities include:

- **Education** Provide type 2 diabetes prevention health education to community partners and individuals to increase their engagement in improving their own well-being through trainings and community events.
- Screenings in Clinics Provide trainings and technical assistance to clinics to integrate prediabetes screening into their clinic workflows and electronic health records.
- Clinic Referrals to Prevention Resources Train providers on community resources available for referrals and work with clinic teams and IT staff to integrate chronic disease prevention resources into the electronic medical record.
- Diabetes Prevention Initiative (DPI) Facilitate collaborative and convene meetings with community partners to raise awareness about prediabetes, screen for prediabetes, refer to the Diabetes Prevention Programs (DPP), and increase insurance coverage and access to culturally competent DPPs.

#### **Healthy Aging**

The Healthy Aging Program aims to promote and protect the health of older adults through evidenced-based practices, collaborative engagement, and policy development. Primary activities include:

- Older Adult Injury Prevention Advance unintentional injury prevention through partnerships to support pedestrian-friendly community environments and the promotion of evidence-based falls prevention approaches.
- Age-Friendly Cities Support cities in planning and implementing initiatives under the World Health Organization's eight domains of livability, spanning the built environment, social inclusion, and preventive services.
- **Determinants of Health** Assess and strengthen partnerships to mitigate social isolation, strengthen older women's financial independence and address needs of immigrant communities as they age.

#### **Healthy Cities Healthy Communities**

The mission of the Healthy Cities Healthy Communities Program is to reduce chronic disease and prevent injury through the adoption of upstream, evidence-based, and innovative practices and policy, systems, and environmental changes. Primary activities include:

- Healthy Cities Dashboard Monitor, provide technical assistance to, and recognize cities for their adoption and implementation of policies and practices that support healthy aging and climate change strategies and that increase access to safe opportunities for physical activity, to healthy food and beverage environments, and to tobacco-free communities.
- Cut the Sugar Coalition Partner with local agencies to promote education campaigns and norm change and to support adoption of local and state level policies that decrease access to sugary drinks.
- **Healthy Worksite Award Program** Offer recognition and technical assistance to nonprofit organizations, cities, and other worksites that adopt healthy worksite policies.



#### **Tobacco-Free Communities**

The mission of the Tobacco-Free Communities Program is to strive for the optimal health of all residents and the workforce in Santa Clara county by eliminating illness and premature death caused by using tobacco products. Primary activities include:

- Smoke-Free Multi-Unit Housing Policy Campaign Promote the implementation of citywide smoke-free housing policies through community education, engagement, and advocacy.
- Reduce Youth Access to Tobacco and Vaping Products Implement initiatives to prevent youth access and exposure to tobacco products, including e-cigarettes and vaping products. Policy interventions include restrictions on the sale of flavored tobacco and reducing the concentration of tobacco stores in communities with a disproportionate burden of tobacco exposure.
- Healthy Stores for a Healthy Community Campaign Monitor and assess, through a statewide campaign, the availability and marketing of tobacco, alcohol, food, beverages, and condoms in the retail environment and promote healthy changes through policy interventions.
- **Promote and Enhance Ouit Support Systems** Support the enhancement of systems to support people quitting tobacco use with a focus on culturally-centered approaches for populations with the highest rates of tobacco use.
- Community Advocate Teens of Today (CATT) Provide youth development, leadership training, and opportunities for youth to lead and engage other youth in tobacco control activities.
- Tobacco-Free Coalition Convene a diverse membership of professional, voluntary and community groups and county residents to gather community input, share expertise, and mobilize engagement in efforts to reduce and/or prevent tobacco use in Santa Clara County.
- Build Community Capacity of Populations Most Impacted by Tobacco Build capacity within the community to resist and counter the tobacco industry's influence and to drive resident-led solutions through community education and organizing, training and technical assistance, and grants to community organizations.



#### **Violence Prevention**

The Violence Prevention Program aims to prevent violence before it occurs through strategic collaboration, community mobilization, and evidence-based programming. Our strategies promote healthy relationships; foster positive social connections; and expand policies and practices that reduce risk factors and increase protective factors at the individual, family, institution, and neighborhood levels, especially within communities most affected by violence and racial and health inequities. Primary activities include:

- East San Jose P.E.A.C.E. (Prevention Efforts Advance Community Equity) Partnership Convene partners to decrease violence and trauma that affects youth, families and the community, advance social capital and relationships and influence equitable economic opportunities. This is one of six Accountable Communities for Health in California addressing population health and health equity.
- **Healthy Teen Relationships Campaign** Prevent dating and domestic violence through education, social marketing and policy/systems change.
- School-based Bullying Prevention Support the adoption of evidence-based bullying prevention programs and policies across schools and community-based organizations.
- Safe and Peaceful Neighborhoods Coordinate partners to build resident empowerment through action planning efforts.
- We All Play a Role in a Safe and Peaceful Community Promote a social marketing campaign designed to increase opportunities for action to improve perceptions of trust, respect and empowerment among young people and adults.
- Community Healing Through Action Facilitate healing centered strategies for residents and system partners.
- **Technical Assistance** Promote best practices in quality improvement and community and partner engagement with a racial and health equity lens.





## References

- Centers for Disease Control and Prevention. About Chronic Diseases. Updated November 2018. Accessed on November 2018 from <a href="https://www.cdc.gov/chronicdisease/about/index.htm">https://www.cdc.gov/chronicdisease/about/index.htm</a>.
- State of California, Department of Finance, E-1 Population Estimates for Cities, Counties and the State with Annual Percent Change — January 1, 2017 and 2018. Sacramento, California, May 2018. Accessed April 2019
- 3. Santa Clara County. About the County. Accessed on April 2019 from https://www.sccgov.org/sites/scc/pages/about-the-county.aspx.
- County of Santa Clara Public Health Department. Santa Clara County 2010 Health Profile Report Executive Summary. Accessed on April 2019 from https://www.sccgov.org/sites/phd/hi/hd/Documents/Health%20 Profile%20Report%202010/scc\_health\_profile\_ex\_summary\_final\_092410.pdf.
- County of Santa Clara Public Health Department. Santa Clara County 2010 Health Profile Report Executive Summary. Accessed on April 2019 from https://www.sccgov.org/sites/phd/hi/hd/Documents/Health%20 Profile%20Report%202010/scc\_health\_profile\_ex\_summary\_final\_092410.pdf.
- County of Santa Clara Public Health Department. Santa Clara County 2010 Health Profile Report Executive Summary. Accessed on April 2019 from https://www.sccgov.org/sites/phd/hi/hd/Documents/Health%20 Profile%20Report%202010/scc\_health\_profile\_ex\_summary\_final\_092410.pdf.
- County of Santa Clara Public Health Department. Santa Clara County 2010 Health Profile Report Executive Summary. Accessed on April 2019 from https://www.sccgov.org/sites/phd/hi/hd/Documents/Health%20 Profile%20Report%202010/scc\_health\_profile\_ex\_summary\_final\_092410.pdf.
- 8. County of Santa Clara Public Health Department. Vital Records Business Intelligence System (VRBIS). 2016. Accessed on May 26, 2017.
- U.S. Census Bureau. 2010 Census: Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M.
   Accessed June 20, 2017 from <a href="https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml">https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</a>.
- 10. The State of U.S. Health, 1990-2016. Burden of Diseases, Injuries, and Risk Factors Among U.S. States. JAMA. 2018; 319(14):1444-1472. doi:10.1001/jama.2018.0158.
- 11. County of Santa Clara Public Health Department. California Department of Public Health. County Health Profile 2017. Healthy People 2020.
- 12. California Department of Education. California Healthy Kids Survey, 2015-2016.
- 13. California Health Interview Survey. CHIS 2016 Adult Survey. UCLA Center for Health Policy Research.
- 14. County of Santa Clara Public Health Department. California Department of Public Health. County Health Profile 2017. Healthy People 2020.
- 15. Centers for Disease Control and Prevention. The State of Aging and Health in America 2013. 2013. https://www.cdc.gov/aging/pdf/State-Aging-Health-in-America-2013.pdf. Accessed September 2018.
- 16. Maizlish N, English D, Chan J, et. al. Climate Change and Health Profile Report: Santa Clara County.

  California Department of Public Health Office of Health Equity. 2017. <a href="https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR085SantaClara\_County2-23-17.pdf">https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/CHPRs/CHPR085SantaClara\_County2-23-17.pdf</a>. Accessed September 2018.
- 17. U.S. Census Bureau. 2017 American Community Survey 1-Year Estimates, Table S0801 Accessed September 27, 2018 from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml.
- 18. California Environmental Protection Agency, Air Resources Board. Air Quality and Emissions, Air Quality Data Statistics (iADAM). Data Retrieved September 20, 2018 from <a href="https://arb.ca.gov/adam/topfour/topfour2.php">https://arb.ca.gov/adam/topfour/topfour2.php</a> (generic site: <a href="https://arb.ca.gov/adam">https://arb.ca.gov/adam</a>).
- 19. Metropolitan Transportation Commissions and Association of Bay Area Governments. Plan Bay Area 2040. Accessed September 2018 from <a href="http://2040.planbayarea.org/sites/default/files/2017-07/Regional%20">http://2040.planbayarea.org/sites/default/files/2017-07/Regional%20</a> Forecast%20Supplemental%20%20Report Final 7-2017 0.pdf.
- 20. Levy S. Growth Projections to 2040—Results, Methodology and Assumptions. Accessed September 2018 from https://www.sanjoseca.gov/DocumentCenter/View/48591.

- 21. Loh M. Exposure to Environmental Hazards and Effects on Chronic Disease. Molecular and Integrative Toxicology Environmental Determinants of Human Health. 2016:27-49. doi:10.1007/978-3-319-43142-0\_2.
- 22. Centers for Disease Control and Prevention. The State of Aging and Health in America 2013. Accessed September 2018 from https://www.cdc.gov/aging/pdf/State-Aging-Health-in-America-2013.pdf.
- 23. City of San Jose. Projections of Jobs, Population and Households for the City of San Jose: A Summary of Results and Methodology 2008. Accessed September 2018 from <a href="https://www.sanjoseca.gov/DocumentCenter/View/3326">https://www.sanjoseca.gov/DocumentCenter/View/3326</a>.
- 24. Centers for Disease Control and Prevention. The State of Aging and Health in America 2013. Accessed September 2018 from <a href="https://www.cdc.gov/aging/pdf/State-Aging-Health-in-America-2013.pdf">https://www.cdc.gov/aging/pdf/State-Aging-Health-in-America-2013.pdf</a>. SAME AS 22
- 25. Centers for Disease Control and Prevention. Older Adult Health & Medical Concerns. Accessed September 2018 from https://www.cdc.gov/aging/emergency/concerns.htm.
- 26. AARP Public Policy Institute. Chronic Care: A Call to Action for Health Reform. Accessed September 2018 from https://assets.aarp.org/rgcenter/health/beyond\_50\_hcr.pdf.
- 27. American Dental Association. Oral Health Topics. Accessed September 2018 from https://www.ada.org/en/member-center/oral-health-topics/aging-and-dental-health.
- 28. Hansen A, Bi P, Nitschke M, Pisaniello D, Newbury J, Kitson A. Older persons and heat-susceptibility: the role of health promotion in a changing climate. Health Promotion Journal of Australia. 2011;22(4):17-20. doi:10.1071/he11417.
- 29. Lunenfeld B, Stratton P. The clinical consequences of an ageing world and preventive strategies. Best Practice and Research Clinical Obstetrics and Gynaecology. 2013;27(5):643-659. doi:10.1016/j. bpobgyn.2013.02.005.
- 30. AARP Public Policy Institute. Chronic Care: A Call to Action for Health Reform. Accessed September 2018 from https://assets.aarp.org/rgcenter/health/beyond 50 hcr.pdf.
- 31. Centers for Disease Control and Prevention. Healthy Places: Health Effects of Gentrification. Updated October 2009. Accessed September 2018 from <a href="https://www.cdc.gov/healthyplaces/healthtopics/gentrification.htm">https://www.cdc.gov/healthyplaces/healthtopics/gentrification.htm</a>.
- 32. California Department of Public Health. Office of Health Equity Healthy Communities Data and Indicators Project. Accessed September 2018 from <a href="https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20">https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20</a> Library/HCI/ADA%20Compliant%20Documents/HCI\_NeighborhoodChange\_772\_NarrativeAndExamples-4-3-15-ADA.pdf. Published 2015.
- 33. Centers for Disease Control and Prevention. Healthy Places: Health Effects of Gentrification. Updated October 2009. Accessed September 2018 from <a href="https://www.cdc.gov/healthyplaces/healthtopics/gentrification.htm">https://www.cdc.gov/healthyplaces/healthtopics/gentrification.htm</a>.
- 34. Zuk M, Bierbaum AH, Chapple K, et. al. Gentrification, Displacement and the Role of Public Investment: A Literature Review. University of California, Berkeley. University of California, Los Angeles. March 2015. Accessed September 2018 from <a href="http://iurd.berkeley.edu/uploads/Displacement\_Lit\_Review\_Final.pdf">http://iurd.berkeley.edu/uploads/Displacement\_Lit\_Review\_Final.pdf</a>.
- 35. Lim S, Chan PY, Walters S, et. al. Impact of residential displacement on healthcare access and mental health among original residents of gentrifying neighborhoods in New York City. December 2017. https://doi.org/10.1371/journal.pone.0190139.
- 36. California Department of Justice, Arrest Data. California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 1990-1999, 2000-2010, 2010-2060 (Oct. 2016).
- 37. County of Santa Clara Public Health Department. VRBIS, 2007-2016. Data as of 05/26/2017.
- 38. U.S. Census Bureau; 2010 Census, Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M. Accessed June 20, 2017 from https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml
- 39. National Center for Health Statistics. Health, United States, 2016: With Chartbook on Long-term Trends in Health. Hyattsville, MD. 2017.
- 40. Office of Statewide Health Planning and Development. 2014 Emergency Department Data.
- 41. State of California, Department of Finance. State and County Population Projection, 2010-2060. Sacramento, California. February, 2017.

- 42. County of Santa Clara Public Health Department. 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. Accessed Sep 26, 2018 from <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.
- 43. County of Santa Clara Public Health Department. VRBIS, 2016. Accessed on May 26, 2017.
- 44. U.S. Census Bureau. 2017 American Community Survey 1-Year Estimates, Tables B15002, B15002B, B15002D, B15002H, B15002I, DP02. Accessed September 21, 2018 from <a href="https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml">https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</a>.
- 45. U.S. Census Bureau. 2017 American Community Survey 1-Year Estimates, Tables B17001, B17001B, B17001D, B17001H, B17001I, DP03. Accessed September 19, 2018 from <a href="https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml">https://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml</a>.
- 46. County of Santa Clara Public Health Department. 2013-14 Behavioral Risk Factor Survey
- 47. Truesdale BC, Jencks C. The Health Effects of Income Inequality: Averages and Disparities. Annual Review of Public Health. 2016; 37(1):413-430. doi:10.1146/annurev-publhealth-032315-021606.
- 48. Rözer JJ, Volker B. Does income inequality have lasting effects on health and trust?. 2016. Social Science & Medicine. 149:37-45. doi:10.1016/j.socscimed.2015.11.047.
- 49. County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. Accessed September 26, 2018 from <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.
- 50. Bay Area Regional Health Inequities Initiative. A Public Health Framework for Reducing Health Inequities. Accessed on April 2019 from <a href="http://barhii.org/framework/">http://barhii.org/framework/</a>.
- 51. Frieden, T.R. A framework for public health action: The health impact pyramid. 2010. American Journal of Public Health, 100(4):590-595.
- 52. PolicyLink. Equity Manifesto. Accessed on March 2019 from <a href="http://www.policylink.org/about-us/equity-manifesto">http://www.policylink.org/about-us/equity-manifesto</a>.
- 53. 53 Frieden, T.R. A framework for public health action: The health impact pyramid. 2010. American Journal of Public Health, 100(4):590-595.
- 54. NH = Non-Hispanic
- 55. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>
- 56. California Health Kids Survey, 2015-16
- 57. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>
- 58. County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey; Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.
- 59. Data Source: 2016 California Health Interview Survey
- 60. County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey; Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.
- 61. Data Source: California Healthy Kids Survey, 2015-2016

- 62. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey; Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2015. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>.
- 63. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey
- 64. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey
- 65. Data Source: County of Santa Clara Public Health Department, VRBIS, 2007-2016. Data as of 05/26/2017
- 66. Data Source: County of Santa Clara Public Health Department, VRBIS, 2007-2016. Data as of 05/26/2017
- 67. California Healthy Kids Survey, 2015-2016.
- 68. California Healthy Kids Survey, 2015-2016.
- 69. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>
- 70. Data Source: U.S. Census Bureau; 2017 American Community Survey 1-Year Estimates, Table DP04;.
- 71. Data Source: California Department of Public Health, Healthy Communities Data and Indicators Project (HCI). https://data.chhs.ca.gov/dataset/food-affordability-2006-2010/resource/916e2a2e-383b-4af5-9f5b-310500961cb5. Data downloaded 9/25/18
- 72. Data Source: U.S. Census Bureau; 2017 American Community Survey 1-Year Estimates, Table S0801;.
- 73. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey
- 74. Data Source: California Healthy Kids Survey, 2015-2016
- 75. Data Source: California Environmental Protection Agency, Air Resources Board, Air Quality and Emissions, Air Quality Data Stataistics (iADAM). Data Retrieved 09/20/2018 from <a href="https://arb.ca.gov/adam/topfour/topfour2.php">https://arb.ca.gov/adam/topfour/topfour2.php</a> (generic site: <a href="https://arb.ca.gov/adam">https://arb.ca.gov/adam</a>/topfour2.php
- 76. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>
- 77. Data Source: Office of Statewide Health Planning and Development, 2014 Emergency Department Data; State of California, Department of Finance, State and County Population Projection, 2010-2060. Sacramento, California, February, 2017
- 78. Data Source: Office of Statewide Health Planning and Development, 2009-2013 Emergency Department Data
- 79. County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>
- 80. Data Source: County of Santa Clara Public Health Department, VRBIS, 2013-2017. Data as of 08/06/2018; U.S. Census Bureau; 2010 Census, Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M;
- 81. Data Source: California Department of Public Health. California Opioid Overdose Surveillance Dashboard. California Department of Public Health. 2016 data. <a href="https://discovery.cdph.ca.gov/CDIC/ODdash/">https://discovery.cdph.ca.gov/CDIC/ODdash/</a>; Centers for Disease Control and Prevention, WONDER, 2012-16 deaths
- 82. Data Source: County of Santa Clara Public Health Department, VRBIS, 2007-2016. Data as of 05/26/2017; U.S. Census Bureau; 2010 Census, Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M;
- 83. Data Source: California Dept. of Justice, Arrest Data; California Dept. of Finance, Race/Ethnic Population with Age and Sex Detail, 1990-1999, 2000-2010, 2010-2060 (Oct. 2016).
- 84. Data Source: County of Santa Clara Public Health Department, VRBIS, 2016. Data as of 05/26/2017.
- 85. Data Source: U.S. Census Bureau; 2017 American Community Survey 1-Year Estimates, Tables B15002, B15002B, B15002D, B15002H, B15002I, DP02.

- 86. Data Source: Applied Survey Research. (2017). Santa Clara County Homeless Census and Survey, The 2017 Annual Homeless Assessment Report (AHAR) to Congress, The U.S. Department of Housing and Urban Development
- 87. Data Source: U.S. Census Bureau; 2017 American Community Survey 1-Year Estimates, Tables B17001, B17001B, B17001D, B17001H, B17001I, DP03;
- 88. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence/">https://www.cdc.gov/brfss/brfssprevalence/</a>
- 89. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey
- 90. Data Source: California Healthy Kids Survey, 2015-2016
- 91. County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey
- 92. Data Source: 2016 California Health Interview Survey
- 93. Data Source: California Healthy Kids Survey, 2015-2016.
- 94. Data Source: Office of Statewide Health Planning and Development, 2009-2013 Patient Discharge Data
- 95. Data Source: California Department of Public Health. California Opioid Overdose Surveillance Dashboard. California Department of Public Health. 2016 data. https://discovery.cdph.ca.gov/CDIC/ODdash/
- 96. Data Source: County of Santa Clara Public Health Department, VRBIS, 2013-2017. Data as of 08/06/2018; U.S. Census Bureau; 2010 Census, Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M;
- 97. Data Source: County of Santa Clara Public Health Department, VRBIS, 2007-2016. Data as of 05/26/2017
- 98. Data Source: County of Santa Clara Public Health Department, VRBIS, 2007-2016. Data as of 05/26/2017; U.S. Census Bureau; 2010 Census, Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M;
- 99. Data Source: County of Santa Clara Public Health Department, VRBIS, 2016. Data as of 05/26/2017; U.S. Census Bureau; 2010 Census, Tables PCT12, PCT12H, PCT12I, PCT12J, PCT12K, PCT12L, PCT12M;.
- 100. California Healthy Kids Survey, 2015-2016.
- 101. Data Source: Applied Survey Research. (2017). Santa Clara County Homeless Census and Survey, The 2017 Annual Homeless Assessment Report (AHAR) to Congress, The U.S. Department of Housing and Urban Development
- 102. Data Source: U.S. Census Bureau; 2017 American Community Survey 1-Year Estimates, Table S0801;
- 103. Data Source: County of Santa Clara Public Health Department, 2013-14 Behavioral Risk Factor Survey, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Population Health. BRFSS Prevalence & Trends Data [online]. 2016. [accessed Sep 26, 2018]. URL: <a href="https://www.cdc.gov/brfss/brfssprevalence">https://www.cdc.gov/brfss/brfssprevalence</a>, Healthy People 2020 Objectives
- 104. Data Source: California Environmental Protection Agency, Air Resources Board, Air Quality and Emissions, Air Quality Data Stataistics (iADAM). Data Retrieved 09/20/2018 from <a href="https://arb.ca.gov/adam/topfour/topfour2.php">https://arb.ca.gov/adam/topfour/topfour2.php</a> (generic site: <a href="https://arb.ca.gov/adam">https://arb.ca.gov/adam</a>)

105.

