



Diabetes Prevention and Wellness Program

Strategic Plan 2023-2028



Table of Contents

<u>Executive Summary</u>	01
<u>Introduction</u>	07
<u>Needs Assessment</u>	29
<u>Strategic Planning</u>	33
<u>Acknowledgements</u>	50
<u>Glossary</u>	53
<u>Appendices</u>	56
<u>References</u>	72



Executive Summary

Type 2 Diabetes

Type 2 diabetes and its precursors, prediabetes and gestational diabetes, place a huge burden of disease on our health system and our community. Prediabetes can lead to other health conditions including the development of type 2 diabetes, heart disease, and stroke.

Between 2021 and 2023, the PHD Diabetes Prevention and Wellness Program (DPWP) engaged a wide range of community stakeholders in a needs assessment and the development of a 6-year strategic plan that would guide its approach to preventing type 2 diabetes. This document lays out the scope of the problem, the DPWP's approach to this collaborative planning process, and the agreed upon strategic focus areas, goals, objectives, and strategies.



- Within 3 to 5 years, approximately **one-fourth** of individuals with prediabetes will progress to diabetes and nearly 70% will develop diabetes within their lifetime.¹
- A 2016 study from the University of California, Los Angeles found that nearly **684,000** people in Santa Clara County (SCC) had prediabetes.²
- Since 2017, there has been more than a **140% increase** in the number of diabetes-related hospitalizations at Santa Clara Valley Medical Center.³
- On average from 2012-2021, diabetes mellitus (Type 1 and Type 2 diabetes) was the **5th leading cause of death** in SCC.⁴

Executive Summary

Disparities

Disparities in diabetes prevalence and outcomes vary across racial and ethnic subgroups. The 2023-2028 DPWP Strategic Plan will prioritize populations most impacted by diabetes which includes:

- Latino, African/African Ancestry, Asian*
- Low income/living below 200% of the federal poverty level
- Education less than high school
- Males
- Zip codes with the highest prevalence of diabetes

Despite SCC being one of the most affluent regions, many in our community are challenged by an environment in which disparities and inequities in health, housing, and economic opportunities persist.

BARHII Framework

The COVID-19 pandemic further contributed to social inequities and income disparities, which impacted access to services, food security, and ultimately the health and quality of life of individuals and families within our county. Because of this, the DPWP utilized the Bay Area Regional Health Inequities Initiative (BARHII) framework, 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.

*Each population group is unique and there are differences within sub-population groups (e.g., Asian American/Pacific Islander).



Executive Summary

Wellness Approach

In addition to complex environmental, structural, and societal risk factors for type 2 diabetes, there are also individual factors and behaviors that increase one's risk. Individual risk factors associated with type 2 diabetes include: eating unhealthy foods, drinking sugar-sweetened beverages, lack of physical activity, constant stress, insufficient sleep, toxins consumed and put on one's body, and not taking care of our whole bodies and mind.

Given that risk factors often intersect, the DPWP team chose to integrate wellness-focused strategies into the 2023-2028 strategic plan to support a whole person care approach. This wellness focused perspective led to the creation of DPWP's six stepping stones, which are health promoting activities that individuals can focus on one step at a time (see Figure 1).

Needs Assessment

To support the development of this strategic plan, the DPWP team conducted a robust needs assessment with the engagement and support of organizational partners and community members. The DPWP team utilized lessons learned from the needs assessment process as a starting point for planning the future of the program by engaging in a strategic planning process.

Figure 1

DPWP Six Stepping Stones to Wellness



Executive Summary

Goals and Focus

The process employed by the DPWP team to develop a shared understanding about the status of diabetes in SCC and create a roadmap for collective action included the following steps: environmental scan, internal analysis, strategic direction, and develop goals, objectives, and strategies. The final step, implementation planning with partners, will take place in 2024 and will include defining metrics of success, setting timelines, identifying strategy owners, and defining a system for tracking progress. This step will also incorporate evaluation and planning for sustainability.

The DPWP Strategic Plan outlines strategies to change the trajectory of diabetes and its negative impacts on the health and wellbeing of residents in SCC. Through a collective impact model and innovative strategies, the burden of type 2 diabetes can be relieved for many in our community. Cross-collaboration with key community partners is imperative to generate and sustain long-term positive outcomes for the most vulnerable in our community.



Focus Area 1: Capacity Building

Goal: Build capacity among Santa Clara County residents, partners, and healthcare systems to effectively address type 2 diabetes prevention and wellness and advance health equity.



Focus Area 2: Clinic to Community Linkages

Goal: Cultivate and strengthen linkages between the clinical and community sectors in Santa Clara County to improve type 2 diabetes prevention and wellness.



Focus Area 3: Promoting Healthy Neighborhoods

Goal: Promote wellness and access to healthy environments in neighborhoods with the highest health disparities.



Focus Area 4: Policy and Advocacy

Goal: Organize support for type 2 diabetes prevention and wellness policies and funding.

See pages 37-48 for detailed focus areas, goals, objectives, and strategies.

Introduction



The mission of the County of Santa Clara Public Health Department (PHD) is to protect and improve the health and well-being of our community.

Between 2021-2023, the PHD Diabetes Prevention and Wellness Program (DPWP) engaged a wide range of community stakeholders in a needs assessment and the development of a 6-year strategic plan that would guide its approach to preventing type 2 diabetes. This document lays out the scope of the problem, the DPWP's approach to this collaborative planning process, and the agreed upon strategic focus areas, goals, objectives, and strategies.

Problem Statement

Type 2 diabetes is a chronic medical condition characterized by high levels of glucose (sugar) in the blood due to the body's inability to properly make or use insulin, a hormone produced by the pancreas. Over time, uncontrolled type 2 diabetes can lead to serious health consequences, including damage to blood vessels, nerves, and organs. This can result in heart disease, stroke, kidney problems (sometimes leading to dialysis), eye issues (retinopathy, which can cause blindness if untreated), nerve damage (neuropathy), and an increased risk of infections and slow wound healing.⁵

The DPWP focuses on addressing prediabetes and gestational diabetes because they are precursors to type 2 diabetes. Prediabetes is the stage when your blood sugar is higher than normal but not high enough for a diagnosis of type 2 diabetes. By making lifestyle changes when someone has prediabetes, they can prevent the progression to type 2 diabetes.

Gestational diabetes is a type of diabetes that occurs during pregnancy in women who do not already have diabetes.⁶ Gestational diabetes is usually resolved once the baby is delivered, but it increases one's risk of developing type 2 diabetes in the future.

Type 2 diabetes and its precursors, prediabetes and gestational diabetes, place a huge burden of disease on our health system and our community. A 2016 study from the University of California, Los Angeles found that nearly 684,000 people in Santa Clara County (SCC) had prediabetes.⁷ Since 2017, there has been more than a 140 percent increase in the number of diabetes-related hospitalizations at Santa Clara Valley Medical Center.⁸

On average from 2012-2022, diabetes mellitus was the 5th leading cause of death in SCC.⁹ The age-adjusted death rates are higher for African/African Ancestry (68%) and Latinos (44%) compared with Whites (23%), and among males (34%) compared with women (18%).¹⁰



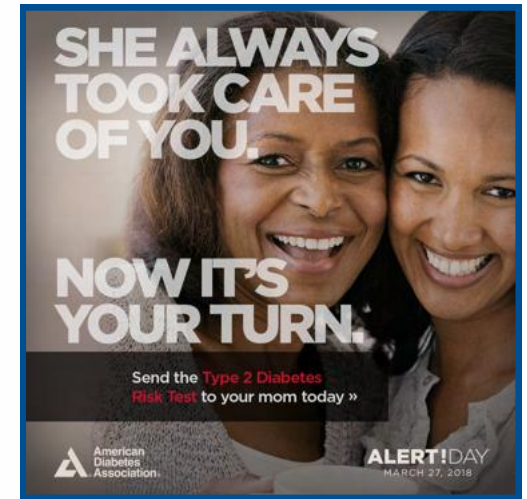
Our History



"Together We Can Prevent Diabetes" Campaign (2015)



ParksRX Day Banner (2018)



"Alert Day" Campaign (2018)

The Diabetes Prevention Initiative

The Diabetes Prevention Initiative (DPI) Collaborative was established by the PHD in response to a referral from the County of Santa Clara Board of Supervisors (BOS) in 2015. The referral aimed to prevent type 2 diabetes in the community by implementing evidence-based strategies and interventions. The referral highlighted the urgency of addressing the sharp increase in diabetes and its burden on our community and health systems.

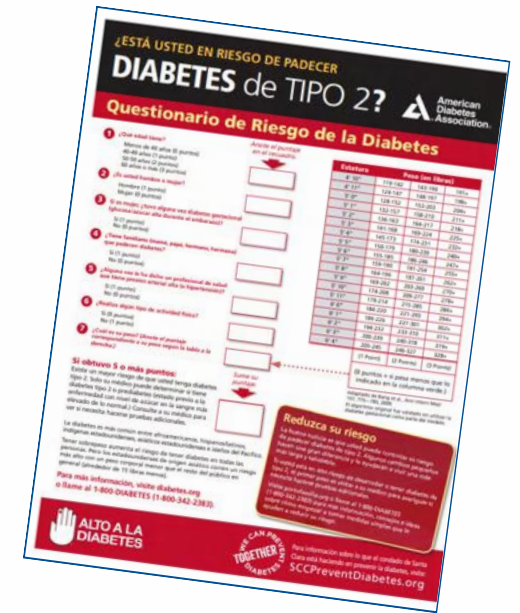
The PHD was asked to create prevention and risk management strategies to reduce type 2 diabetes in SCC. The DPI Collaborative worked with community partners, health plans, health systems, academic institutions, and health care professionals to develop the 2016-2019 DPI Strategic Plan to address community needs. The DPI Collaborative successfully raised awareness about prediabetes, increased screening for prediabetes in community and clinic settings, and advocated for insurance coverage for the Diabetes Prevention Program (DPP). The DPP is a Centers for Disease Control and Prevention (CDC) evidence-based lifestyle change program designed to prevent or delay type 2 diabetes.¹¹



2016-2018 Strategic Plan

Our History

In 2020, the DPI Collaborative and PHD worked together to address the health threats of COVID-19 for people who have or may develop type 2 diabetes. As a result, the focus of the work was expanded from preventing the disease alone to promoting wellness and reducing risk factors, such as poor nutrition, sedentary lifestyle, inadequate sleep, stress, and environmental toxins. The incorporation of wellness-focused strategies led to an expansion of the DPI and change in the program name to the Diabetes Prevention & Wellness Program (DPWP).



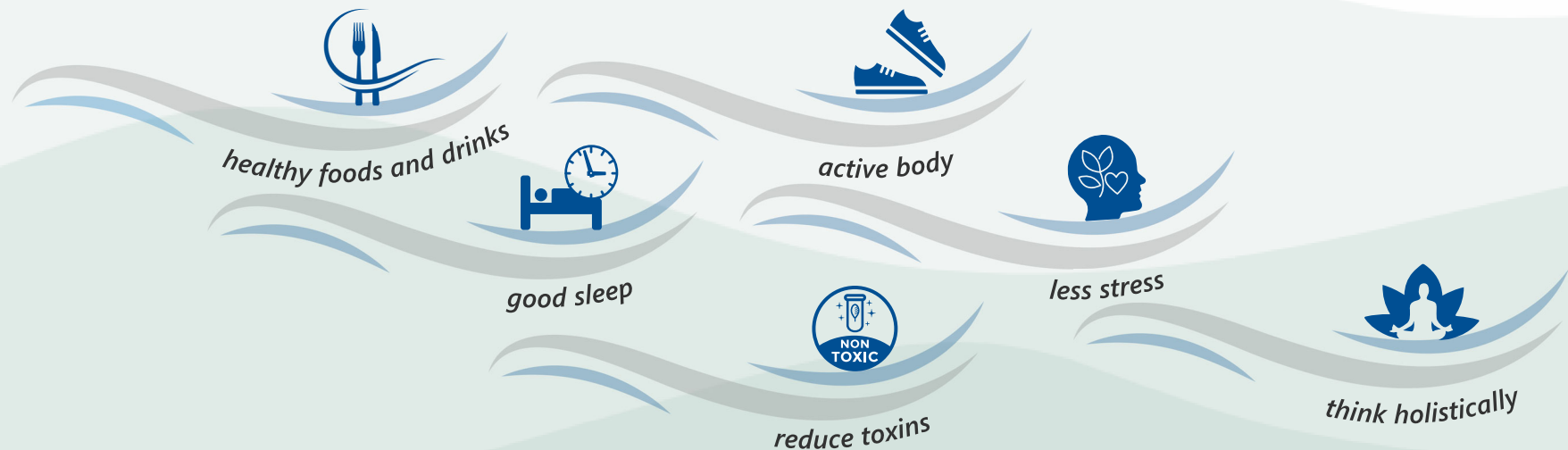
The Diabetes Prevention and Wellness Program

The DPWP aims to prevent type 2 diabetes by promoting wellness and healthy habits to address prediabetes and gestational diabetes. The program focuses on making the healthy choice the easy choice and removing barriers to health.

Wellness is a way of enhancing our health and preventing chronic diseases. It involves adopting habits and practices that promote holistic wellbeing. Rather than only focusing on the absence of disease, the focus is on how well we feel and on making and sustaining changes that will support wellbeing. The six stepping stones of the DPWP are to make small improvements in your health, one step at a time, by moving your body, consuming healthy food and beverages, getting enough sleep, reducing stress, minimizing environmental toxins, and taking care of your entire body (e.g., heart, brain, mouth). The DPWP calls these habits, "Riding the Wellness Wave." (see Figure 2).

Figure 2

DPWP "Riding the Wellness Wave" Infographic featuring the Six Stepping Stones to Wellness



The State of Diabetes

Diabetes continues to impact the health of our communities, both nationally and locally.¹²

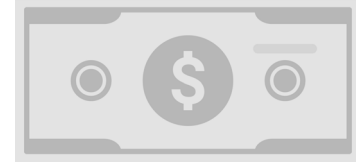
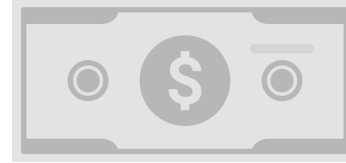
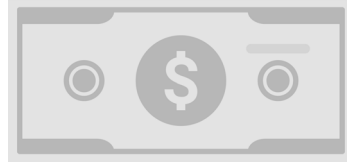
Of the 37.3 million U.S. adults with some type of diabetes,

90 to 95%

have type 2 diabetes¹³



\$413 billion is spent on diabetes, including healthcare costs and loss of productivity, among other indirect costs¹⁴



\$1 out of \$4

U.S. health care dollars spent on caring for people with diabetes¹⁴

People diagnosed with diabetes incur on average \$19,700 in medical expenses each year, which is **2.6 times** the amount compared with someone without diabetes¹⁵



Not only is diabetes a predominant chronic disease across the nation, but it also impacts many SCC residents.

From 2012 to 2021, diabetes was the
**5th leading
cause of death** in our county¹⁶



Type 2 diabetes is the predominant type of diabetes, and approximately,

88% of all SCC residents

18 years and older who have diabetes, have type 2 diabetes¹⁸



9% of SCC residents were diagnosed with a type of diabetes in 2021¹⁷

The data below depicts the severity of diabetes and highlights health disparities in diabetes related outcomes in SCC:

- Populations with the highest age-adjusted rates for diabetes related ED visits include **African/African Ancestry residents and females, and residents over 85 years of age**¹⁹
- In 2021, there were **30,406** diabetes-related hospitalizations²⁰
- Populations with the highest adjusted rates of hospitalizations include **African/African Ancestry residents, males, and residents over the age of 85 years**²¹
- **African/African Ancestry, Latino, and male residents** have the highest adjusted rates of diabetes deaths²²

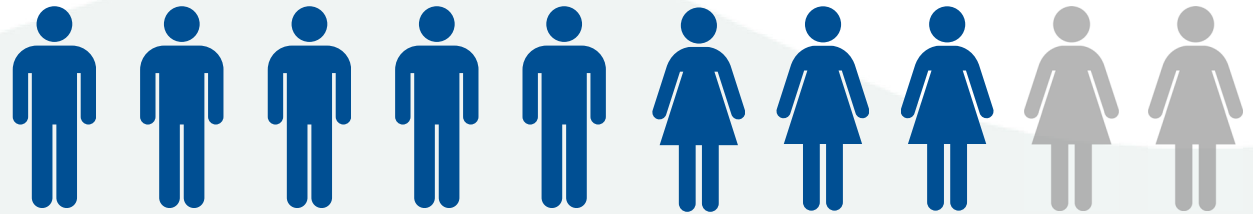


Prediabetes

Development of type 2 diabetes can be prevented by addressing prediabetes and gestational diabetes as early as possible.



98 million U.S. adults live with prediabetes²³

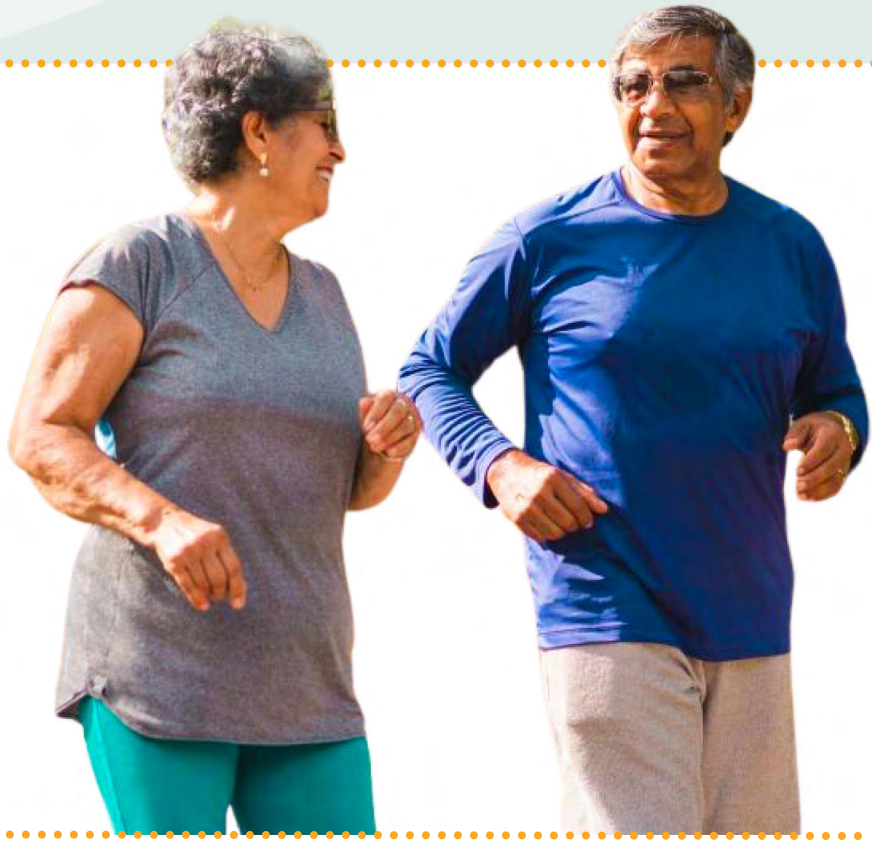


8 out of 10 don't know they have prediabetes²³

Prediabetes often goes **undetected** and locally, only **22%** of SCC residents have ever been told they have prediabetes²⁴



Within 3 to 5 years, approximately **one-fourth** of individuals with prediabetes will progress to diabetes and nearly **70%** will develop diabetes in their lifetime²⁵



Unlike type 2 diabetes, there is much less data on the large population of people living with prediabetes. For SCC residents who are ages 18 years and over, who have prediabetes:

- **Almost half are low income:** 49% have an annual household income of \$5,000 to \$50,000 per year²⁶
- **19% are males** compared with 16% are females²⁷
- **52% have high blood pressure**²⁸
- **8% smoke**²⁹

Prediabetes can lead to other health conditions including the development of type 2 diabetes, heart disease, and stroke. Screening, early identification, and treatment of prediabetes is critical.

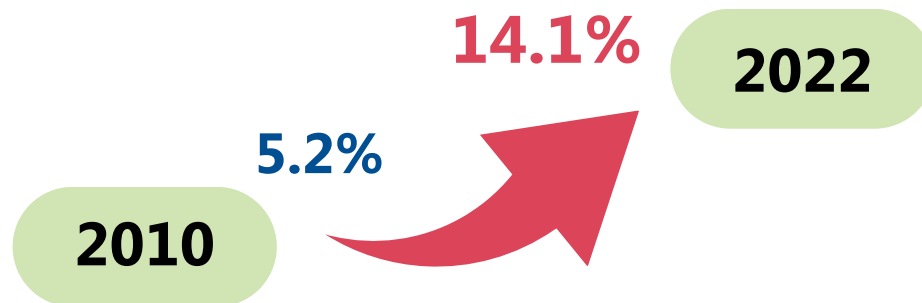
Gestational Diabetes

Having gestational diabetes increases a person's risk for type 2 diabetes after pregnancy. To prevent type 2 diabetes, it is essential to prioritize support for individuals with or at risk of gestational diabetes.

Across the U.S., up to **10%** are affected by gestational diabetes.

50% of pregnant persons with gestational diabetes are likely to develop type 2 diabetes³⁰

Every year, the percent of births among all SCC residents with gestational diabetes has been **increasing**



In 2022, Asian/Pacific Islander residents had the

highest rates (18%)

of gestational diabetes compared with other racial and ethnic groups.



20% of births among all SCC residents that had gestational diabetes were ages

45 years and older,

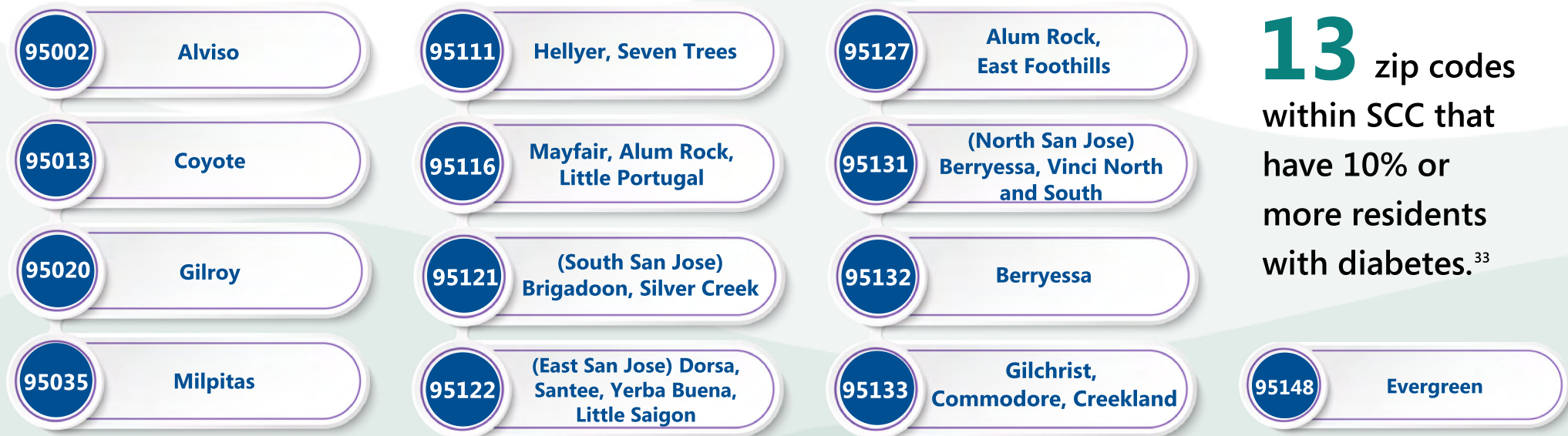
which is the highest rate of gestational diabetes compared to other age groups³¹

DPWP Priority Populations

Diabetes is a widespread chronic disease impacting overall health and wellness of individuals. Disparities in diabetes prevalence and outcomes vary across racial and ethnic subgroups. The 2023-2028 DPWP strategic plan will prioritize populations most impacted by diabetes which includes Latino, African/African Ancestry, Asian, low income/living below 200% of the federal poverty level,³² education less than high school, males, and zip codes with the highest prevalence of diabetes. There are thirteen zip codes within SCC that have 10% or more residents with diabetes (See Figure 3):

Figure 3

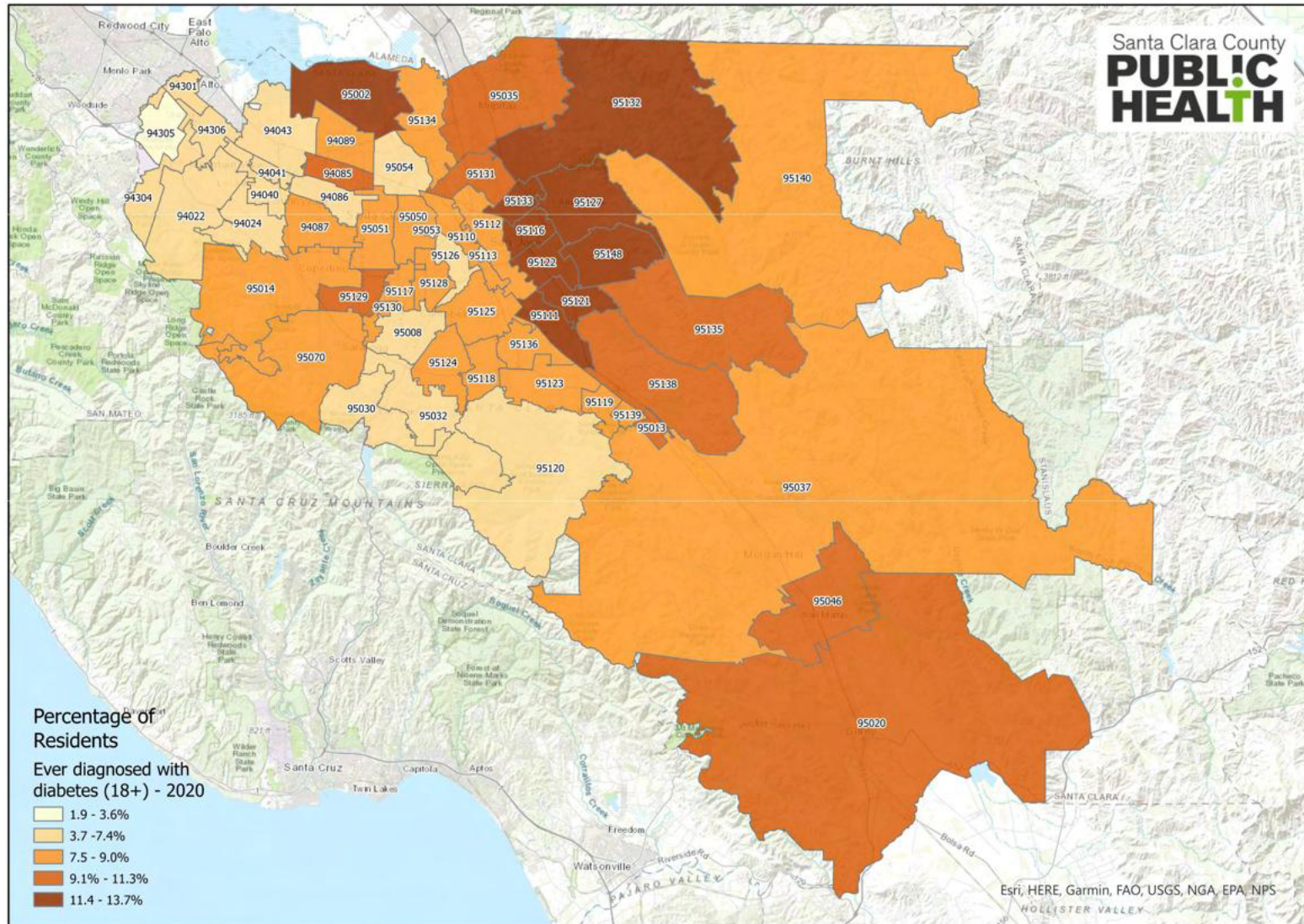
Thirteen Santa Clara County Zip Codes with Diabetes Incidence of 10% or More



It is important that prevention strategies are equitably distributed across diverse populations and reach the most vulnerable in the community using a health equity lens. Strategies must be driven by a shared vision with input from community members. Overall, there is no one size fits all prevention strategy as each population group is unique and there are differences within sub-population groups.

Figure 4

Prevalence of Diabetes in Santa Clara County Residents 18 and Over by Zip Code



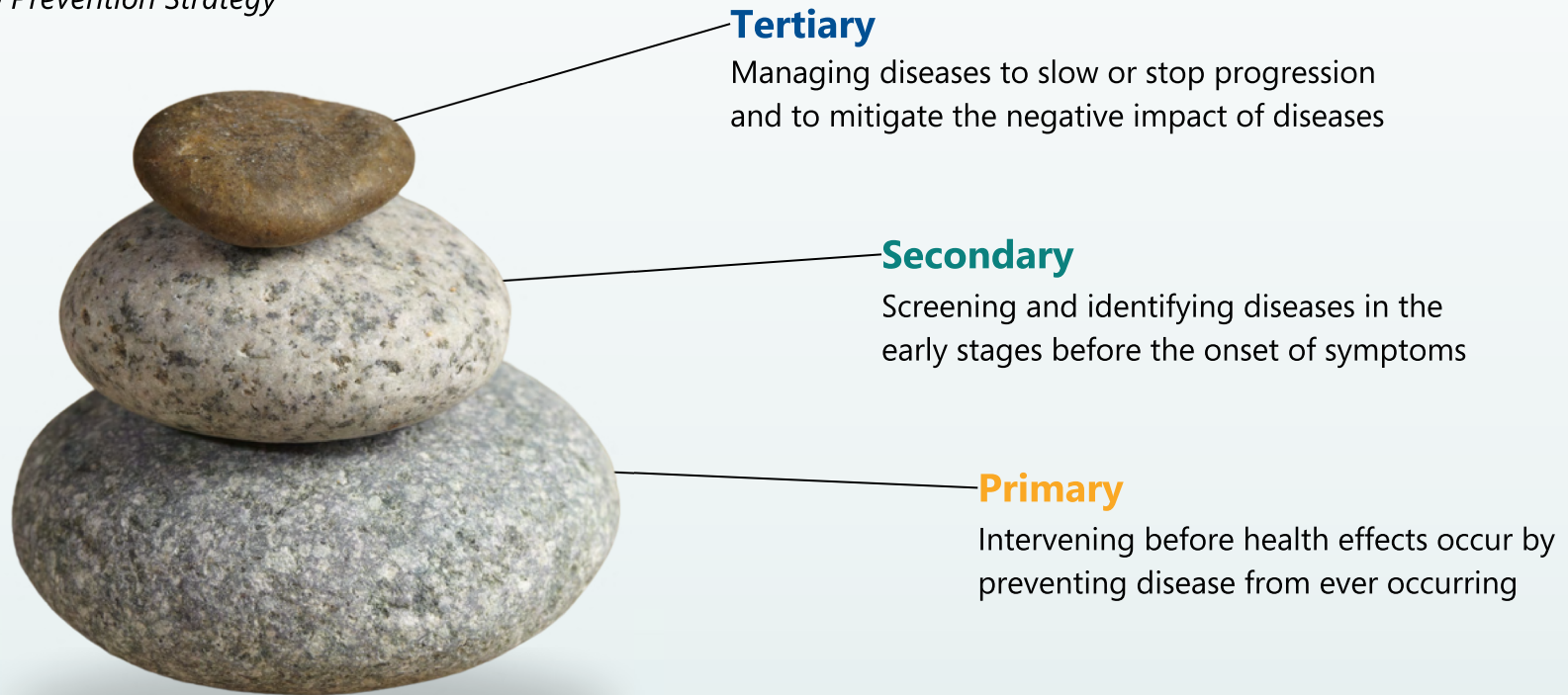
Note: Adapted from 2020 Percentage of Residents Ever Diagnosed With Diabetes. AskCHIS Neighborhood Edition. Please note that many estimates produced in AskCHIS Neighborhood Edition are not direct estimates. For more information on the methodology used to calculate estimates please visit: <http://healthpolicy.ucla.edu>.

Primary Prevention Approach

Prevention strategies are typically categorized into three types including primary, secondary, and tertiary prevention (see Figure 5). Public health employs a primary prevention approach and health promotion rather than focusing on diagnosis and treatment of disease.^{34, 35}

Figure 5

The Three-Step Prevention Strategy



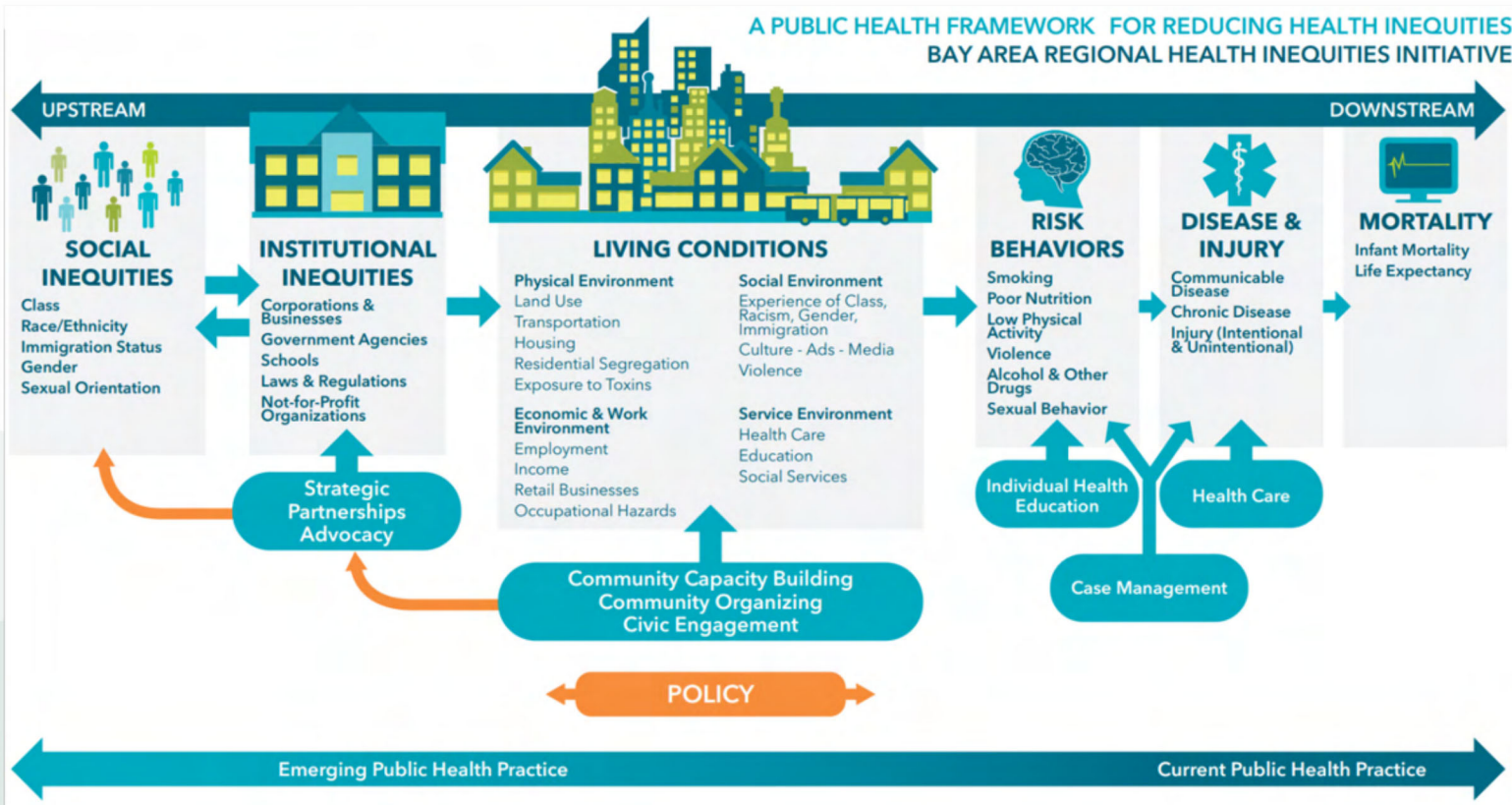
The PHD is committed to preventing chronic diseases for all residents. Recent success in large-scale public health interventions to reduce tobacco use and obesity demonstrates that a comprehensive, coordinated, and community-focused primary prevention approach is far more effective than clinical interventions alone.

BARHII Framework

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 (see Figure 6). Health inequities are differences in health that are avoidable, unfair, and unjust. Health inequities experienced by SCC residents are largely shaped by institutional racism, education, and income.

Figure 6

A Public Health Framework for Reducing Health Inequities, Bay Area Regional Health Inequities Initiative (BARHII)



Note: A Public Health Framework for Reducing Health Inequities - Bay Area Regional Health Inequities Initiative (BARHII). County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2024 - 2028, p. 23. March, 2024.

The BARHII model is used as a decision-making framework for the PHD’s prevention work towards health equity for all residents. The DPWP team utilized the BARHII framework to guide the development of the strategic plan focus areas and the plan’s goals, objectives, and strategies to address the root causes of disease, advance health equity and ultimately prevent type 2 diabetes. The BARHII framework moves from clinical and individual-based interventions to broad neighborhood, environmental, and social strategies, coupled with capacity-building, 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.

Figure 7

Six Pillars of the BARHII Framework



The BARHII framework moves from clinical and individual-based interventions to broad neighborhood, environmental, and social strategies, coupled with capacity-building, 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 (see Figure 7). 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.

Demographic Characteristics and Disparities

Santa Clara County (SCC), located in the heart of Silicon Valley, is the most populous county in the San Francisco Bay Area, and the 6th largest county in California. SCC is a minority-majority county comprised of 25% Latino; 2% African/African Ancestry; 0.3% Pacific Islander; 38% Asian; 30% White (Non-Hispanic) residents; and 4.7% other or unreported.³⁶ Four in ten residents are foreign-born representing various world regions—with 68% from Asia and 21% from Latin America.³⁷ More than half of county residents ages 5 years and over (53%) speak a language other than English at home, and more than half of county residents ages 25 years and older (54%) have attained a bachelor's degree or higher education.³⁸

With a highly diverse and educated workforce, SCC stands as one of the most affluent communities in the nation—boasting worldwide entrepreneurial recognition in areas of business, innovation, and technology. Nevertheless, many are challenged by an environment in which disparities and inequities in health, housing, and economic opportunities persist.

The COVID-19 pandemic further contributed to social inequities and income disparities, which impacted access to services, food security, and ultimately the health and quality of life of individuals and families within our county. From 2017-2021, it is estimated that 11.4% of the county's families live at or below 200% of the federal poverty level (\$53,000 for a family of four in 2021).^{39, 40} The average annual earnings in Silicon Valley in 2023 was estimated to be \$188,875,⁴¹ while the average income for service workers in the region was \$46,538.⁴²



Wellness Across the Life Course

The DPWP recognizes that type 2 diabetes prevention is not only about addressing the underlying factors that contribute to the disease, but also about promoting wellness throughout the life course (see Figure 10, page 28). This means that prevention efforts should begin from the prenatal period and extend to the end of life and include interventions for gestational diabetes and prediabetes. The DPWP, in collaboration with community partners, has adopted the following definition of wellness (see Figure 8). This definition will be used for engaging the community and organizational partners in implementation planning.

Whole-Person Care Approach

In addition to complex environmental, structural, and societal risk factors for type 2 diabetes, there are also individual factors and behaviors that increase one's risk. Individual risk factors associated with type 2 diabetes include: eating unhealthy foods, drinking sugar-sweetened beverages, lack of physical activity, constant stress, insufficient sleep, toxins consumed and put on one's body, and not taking care of our whole bodies and mind. Given that risk factors often intersect, the DPWP team chose to integrate wellness-focused strategies into the 2023-2028 Strategic Plan to support a whole-person care approach.

Figure 8

DPWP Definition of Wellness with a Whole-Person Care Approach

Wellness is not just surviving, it is thriving.



Wellness is a **balance** of all aspects of a person's health: **mental, emotional, physical, social, and spiritual.**



We can support a person's wellness through **choices, freedom, knowledge (health literacy), resources, and providing a safe environment that promotes culture, diversity, and human connections.**



Wellness is an **active process** that we continually work towards to achieve **joy, peace, wellbeing, and holistic health.**

This wellness focused perspective led to the creation of DPWP’s six stepping stones (see Figure 9). The six stepping stones are health promoting activities that individuals can focus on one step at a time such as: consuming healthy food and beverages, moving your body, getting enough sleep, reducing stress, minimizing environmental toxins, and taking care of your entire body (e.g., heart, brain, mouth).

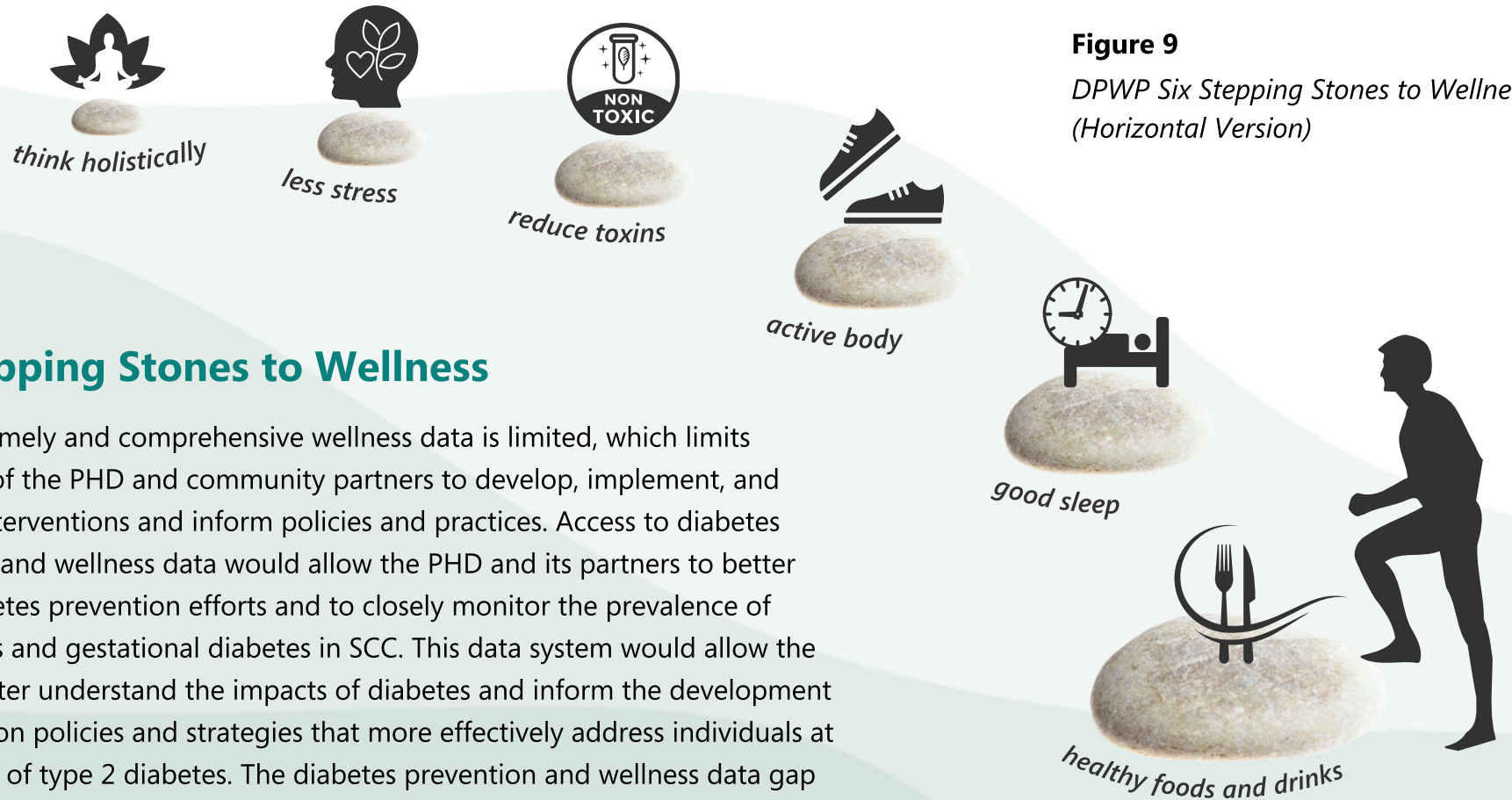


Figure 9

*DPWP Six Stepping Stones to Wellness
(Horizontal Version)*

Six Stepping Stones to Wellness

Access to timely and comprehensive wellness data is limited, which limits the ability of the PHD and community partners to develop, implement, and evaluate interventions and inform policies and practices. Access to diabetes prevention and wellness data would allow the PHD and its partners to better direct diabetes prevention efforts and to closely monitor the prevalence of prediabetes and gestational diabetes in SCC. This data system would allow the PHD to better understand the impacts of diabetes and inform the development of prevention policies and strategies that more effectively address individuals at highest risk of type 2 diabetes. The diabetes prevention and wellness data gap presents an opportunity to develop and implement new methods and tools that can support collecting new data and better leveraging existing data. Increasing collection, access, and utilization of wellness data and chronic disease surveillance data is one of the strategies in the 2023-2028 DPWP Strategic Plan.

Wellness Data by Age



25%

of SCC residents experienced psychological distress in the past year ⁴⁴

46%

SCC Residents Ages 0-17 years drank more than one glass of sugary drinks the day prior ⁴³



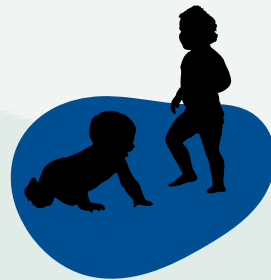
35%

SCC Residents Ages 0-11 years ate five or more servings of fruits/vegetables daily ⁴⁵



29%

SCC Residents Ages 12-17 years ate five or more servings of fruits/vegetables daily ⁴⁶



Infant / Toddler (0 to 5 years)



School-Aged Children (5 to 17 years)



Young Adults (18 to 25 years)



Adults (26 to 60 years)



Older Adults (60+ years)

Figure 10

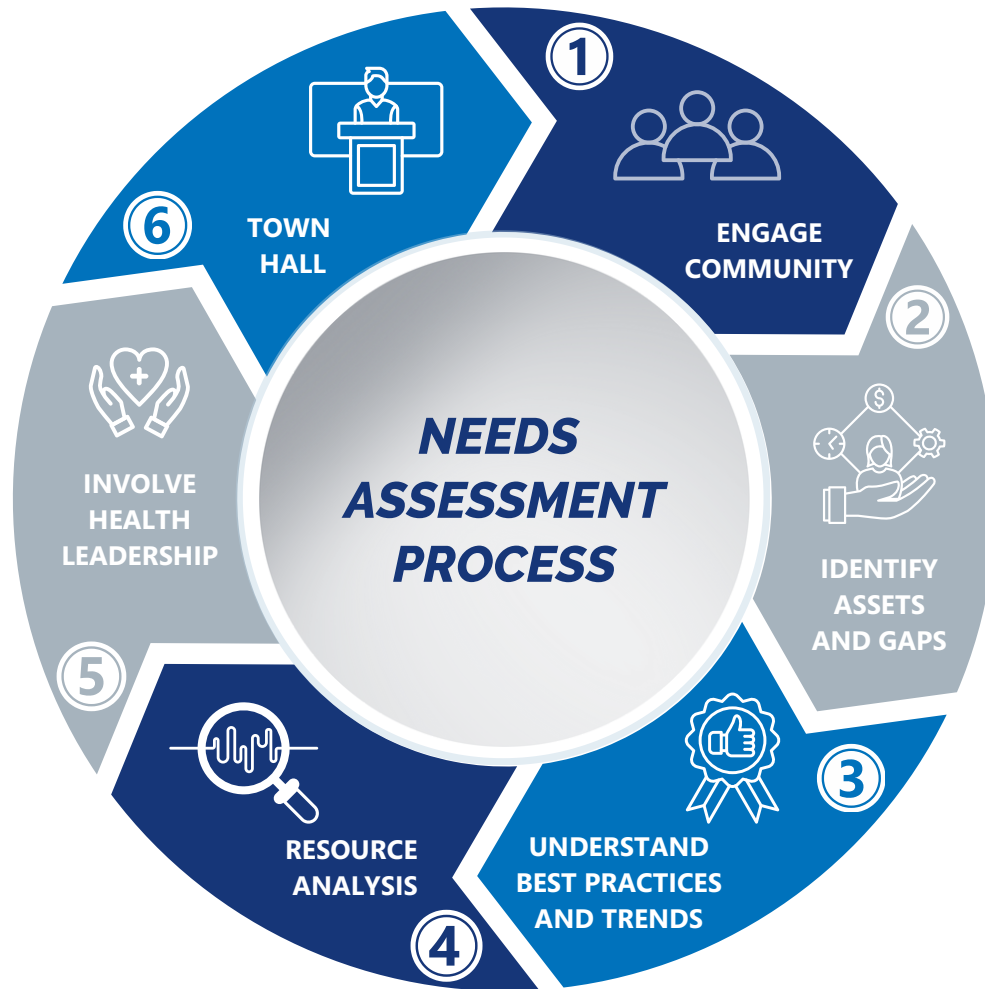
Wellness Data Across the Life Course

Needs Assessment

Figure 11

DPWP Needs Assessment Methodology

To support the development of this strategic plan, the DPWP team conducted a robust needs assessment with the engagement and support of organizational partners and community members.



Methodology

The needs assessment process included engaging the community and partners in identifying assets and gaps in type 2 diabetes prevention. To gain a deeper understanding of problems, gaps, resources, best practices, and trends, the DPWP team conducted an analysis of wellness resources, held community conversations, and conducted key informant interviews with local medical providers and health leaders. A public town hall meeting was held to encourage people living with diabetes and their caregivers to join the conversation.

Collectively, these activities and analyses provided a baseline understanding of the state of diabetes in the county, helped to identify gaps and needs, and provided a foundation for strategic planning.

Table 1*Community Engagement Activities (Conducted as part of the DPWP Needs Assessment)*

Timeline	Needs Assessment Activity	Activity Process and Focus*
January 2022	1st Townhall - Kick Off	The DPI focused on engaging providers, community agencies, and PHD staff. Attendees were part of focus groups in May and June 2022.
February 2022	2nd Townhall	Engaged persons who have lived experiences with prediabetes, type 2 diabetes, and utilizers of diabetes prevention programs. Discussion topics included prevention, wellness, feedback and reflection of current diabetes prevention efforts or gaps of program presence, and gaps in screening for diabetes (HbA1c testing).
February 2022	Spanish Focus Group	Facilitated a session in Spanish to engage community members in shared vision setting for the prevention of type 2 diabetes.
May 2022	Work Group	Facilitated two workgroups focused on health promotion and education.
May 2022	Work Group	Facilitated two workgroups focused on the integration of diabetes prevention services.
May and June 2022	Work Group	Facilitated two workgroups focused on access to early detection and follow up for diabetes.
June through August 2022	Key Informant Interviews	Conducted key informant interviews with healthcare providers and health leaders.

* Note: Table 1 (shown above) is a summary of activities for community engagement conducted as part of the DPWP Needs Assessment.

Findings

Key findings from the community engagement portion of the needs assessment were incorporated into the strategic planning process and helped to inform the focus areas, goals, objectives, and strategies presented in this plan. A high-level summary of key takeaways from community engagement and conversations includes:

- HbA1c screening (a screening test that can detect prediabetes and type 2 diabetes) should be **universal**.
- There is a need to **raise awareness and increase education about chronic diseases earlier in life**, with a focus on **engaging and increasing awareness among families**.
- **Restriction on the sales of high sugary drinks and unhealthy food items** is a strategy that governments should explore and pursue.
- To support type 2 diabetes prevention, we need to help patients and families with **stress management and social determinants of health** such as food insecurity and access to public transportation.
- It is important to **integrate primary care medicine and public health interventions for the prevention of chronic disease**. Integration of **peer-to-peer outreach and education** is one key strategy.





- **Partnerships between health clinics and public health** are needed. Connections between public health, clinics, and community organizations should be **ongoing** to improve health outcomes of the community.
- We need to create an **infrastructure** for community-based health programs to **integrate referrals** directly into the electronic medical record system.
- **Integrate type 2 diabetes services and resources** at community sites and safety-net health care systems. **Invest in the community** by funding the integration of services as envisioned by the community.
- There is a need for **specialists and interdisciplinary support** to address diabetes prevention and wellness (e.g., nutritionists, diabetes educators, psychologists, classes for mindfulness and lifestyles, food pharmacy, meal delivery services, and diabetes awareness at different events).
- We need more **community resources that are easily accessible to diverse populations** in multiple languages across the County during non-work hours.
- We need staff beyond the primary care provider to **follow up** with patients and **provide prevention education** in multiple languages.



Methodology

The DPWP team utilized lessons learned from the needs assessment process as a starting point for planning the future of the program by engaging in a strategic planning process. The process employed by the DPWP team to develop a shared understanding about the status of diabetes in SCC and create a roadmap for collective action included the following steps:

1 Environmental Scan

The DPWP team conducted an environmental scan to identify factors that may impact the direction of the program. This scan included analyzing data and reviewing the priorities of agencies and strategies most relevant to the DPWP to maximize alignment (e.g., local, state, and federal strategies to address type 2 diabetes prevention and wellness). These strategies were cross referenced with the findings of the needs assessment and utilized as a starting point for developing a strategic direction. Data analyzed provided indicators of prevalence, disease severity in priority populations, and health disparities based on income, race and ethnicity, zip code, educational attainment, and gender.

2 Internal Analysis

The DPWP conducted an internal analysis of PHD's capacity for addressing type 2 diabetes prevention based on the findings from the needs assessment and environmental scan. This step included reviewing staffing, prior successes, and challenges, and identifying areas of strength and improvement. The internal analysis also included reviewing information from existing SCC plans and identifying alignment. The 2020-2024 PHD Chronic Disease Prevention Strategic Plan provides the direction for the DPWP's work.⁴⁷ DPWP aligns its vision and guiding principles with this plan and reflects its goals of preventing and managing type 2 diabetes, a major chronic disease that affects many SCC residents.

Table 2*Sources of Information and Data Utilized in the Environmental Scan and Internal Analysis*

Information Data Source	Information Data Utilized
California Health Interview Survey (CHIS) data, 2016-2022	Prevalence data for prediabetes and type 2 diabetes, demographic information, lifestyle habit information
2020 AskCHIS Neighborhood Edition	Diabetes by zip code
County of Santa Clara Public Health Department, California Integrated Vital Records System, 2006-2022 Births	Prevalence data for gestational diabetes
U.S. Census Bureau, 2012-2021 American Community Survey 5-year estimates	Santa Clara County demographic information
County of Santa Clara Public Health Department, 2012-2021 Death Statistical Master File	Leading causes of death, diabetes deaths by demographics
County of Santa Clara Public Health Department Chronic Disease Prevention Strategic Plan, 2020-2024	Key learnings from plan and alignment with focus areas
T2020 Universal A1C Screening Pilot Report	Key learnings from pilot design and implementation
Healthy Communities Branch Diabetes Prevention and Wellness Inventory	Gaps in programming to address diabetes prevention and wellness

3 DPWP Collaborative Strategy

The DPWP's strategic direction was created in partnership with the DPI and other key stakeholders. Since the beginning of the planning process, the DPWP met with over 30 partners and engaged the DPI Collaborative 19 times via Collaborative meetings and individual meetings. The DPWP team worked closely with the DPI Collaborative, local leaders in chronic disease prevention, and organizational partners to utilize the information gathered in the environmental scan and internal analysis to co-define the strategic direction for 2023-2028.

4 Goals and Objectives Development

Goals, objectives, and strategies were co-developed and refined through a series of individual working meetings with community organizational partners. Between March and October 2023, the DPWP team held 37 of these meetings to ensure that the strategic direction, focus areas, goals, objectives, and strategies were fully vetted by partners, and to begin identifying champions and owners for the work by discussing alignment and opportunities for collaboration. The PHD Executive Team provided critical feedback and guidance throughout this process.

5 Plan Implementation

Implementation planning will follow the release of this plan. Together with community partners, implementation and evaluation plans will be drafted in 2024 and will include defining metrics of success, setting timelines, identifying strategy owners, and defining a system for tracking progress. This step will also incorporate evaluation and planning for sustainability. The DPWP will serve as the backbone organization for the Strategic Plan implementation and evaluation. Partners will co-develop implementation and evaluation plans and execute strategies in the plan. The DPWP will continue facilitating DPI Collaborative meetings and will work on gathering all evaluation data to measure the collective impact on diabetes prevention and wellness. With type 2 diabetes being a widespread chronic disease, it requires partners from across the County to help address it and improve the health and wellbeing of SCC residents.



Vision

The DPWP envisions a future in which there is no more type 2 diabetes, and where all Santa Clara County residents thrive in healthy and safe communities.

Methodology

The DPWP team closely followed the guiding principles defined in PHD's 2020-2024 Chronic Disease Prevention Strategic Plan. The guiding principles include having our planning process:

- Be data driven
- Be prevention focused
- Be grounded in best and promising practices
- Prioritize health equity
- Seek sustainable change
- Foster collaborative community and government partnerships
- Consider reach
- Address the life span
- Emphasize upstream approaches

Figure 12

DPWP Strategic Planning Guiding Principles



Focus Area

Capacity Building





The **Capacity Building** focus area aims to address type 2 diabetes prevention and wellness by strengthening the infrastructure of healthcare systems, empowering partners and residents to identify strategies that will resonate with their communities and increasing the use and availability of data to inform interventions.

To strengthen the healthcare system infrastructure, the engagement of and coordination among key players such as health care administrators, clinical providers and staff, health plans, and community members, is critical. To utilize community assets to identify and implement type 2 diabetes prevention approaches, community members and public and private organizations have the opportunity to come together to find community-grown innovative solutions. Access to data to make data-informed decisions and track progress is also critical in building capacity within our various healthcare and health promoting systems.





Goal

Build capacity among Santa Clara County residents, partners, and healthcare systems to effectively address type 2 diabetes prevention and wellness and advance health equity.

Objective 1: Strengthen the type 2 diabetes prevention and wellness infrastructure within healthcare systems.

- Strategy 1.1:** Secure funding and resources for outreach, referral, and provision of type 2 diabetes prevention interventions.
- Strategy 1.2:** Inform and support building foundational knowledge among healthcare workers on type 2 diabetes prevention and wellness resources that will support their patients.
- Strategy 1.3:** Identify unique ways that community health workers, promotoras, peer navigators, and other similar roles can support type 2 diabetes prevention and wellness work.

Objective 2: Collaborate with partners and residents to elevate community assets and prevent type 2 diabetes.

- Strategy 2.1:** Identify community driven approaches for type 2 diabetes prevention and wellness in neighborhoods with the highest health disparities.
- Strategy 2.2:** Increase engagement using new service delivery models and innovative technology for type 2 diabetes prevention and wellness.



Objective 3: Use timely, local data to inform type 2 diabetes prevention and wellness strategies.

- Strategy 3.1:** Improve type 2 diabetes prevention and wellness data collection and management; increase data quality; and expand reporting capabilities.
- Strategy 3.2:** Improve access and utilization of type 2 diabetes prevention and wellness data.

Focus Area

Clinic to Community Linkages



Clinic to Community Linkages



The [Clinic to Community Linkages](#) focus area helps to connect and coordinate providers, community organizations, public health agencies and the community itself to improve access to preventive, wellness, and medical services.⁴⁸ These linkages also support the clinical sector in better understanding and addressing SDOH.

Cultivating and strengthening linkages between the clinical and community sectors have proven to be effective strategies to prevent and control chronic diseases. By working together rather than in silos, these sectors can better meet the needs of patients, their families, and communities. Programs that have used a community-clinical approach have demonstrated improved behavioral changes and health outcomes across chronic diseases, including diabetes.⁴⁹

The clinic to community linkages focus area will support strengthening existing and developing new linkages between these sectors to improve care coordination, promote healthy behaviors, close service gaps, and more effectively involve patients, families, and communities in their care.



Clinic to Community Linkages



Goal

Cultivate and strengthen linkages between the clinical and community sectors in Santa Clara County to improve type 2 diabetes prevention and wellness.

Objective 1: Increase awareness among residents at risk for type 2 diabetes and connect them to prevention and wellness resources.

Strategy 1.1: Explore ways to make risk testing and free A1C screenings easily accessible.

Strategy 1.2: Connect those with a diagnosis of prediabetes or gestational diabetes to prevention and wellness resources.



Objective 2: Prioritize linkages with organizations providing free-to-low cost type 2 diabetes prevention and wellness services.

Strategy 2.1: Coordinate and integrate culturally centered type 2 diabetes prevention and wellness resources.



Objective 3: Design and pilot a Clinic to Community Linkages framework using CDC guidance.

Strategy 3.1: Identify linkages strategies and support their implementation to improve coordination of services between clinics and community-based organizations.

Focus Area

Promoting Healthy Neighborhoods



Promoting Healthy Neighborhoods



The **Promoting Healthy Neighborhoods** focus area aims to create environments where healthy choices are accessible, affordable, and culturally tailored to the communities with the highest rates of type 2 diabetes.

The availability of healthy foods, clean air, and safe places for physical activity and respite from the heat, all strongly influence the health and wellbeing of residents. Furthermore, marketing and messaging influences residents' purchasing and lifestyle choices. Beginning diabetes prevention and wellness early in the lifespan within schools increases the likelihood of adopting healthy behaviors later in life.



Promoting Healthy Neighborhood



Goal

Promote wellness and access to healthy environments in neighborhoods with the highest health disparities.

Objective 1: Make healthy food and beverages more accessible, increase safe places for physical activity and respite from climate threats, and improve wellness in schools.

Strategy 1.1: Increase awareness and use of local programs that make healthy foods and beverages more accessible, affordable, and culturally appropriate.

Strategy 1.2: Promote access to safe and healthy neighborhood places for physical activity to reduce toxic stress and improve emotional wellbeing.

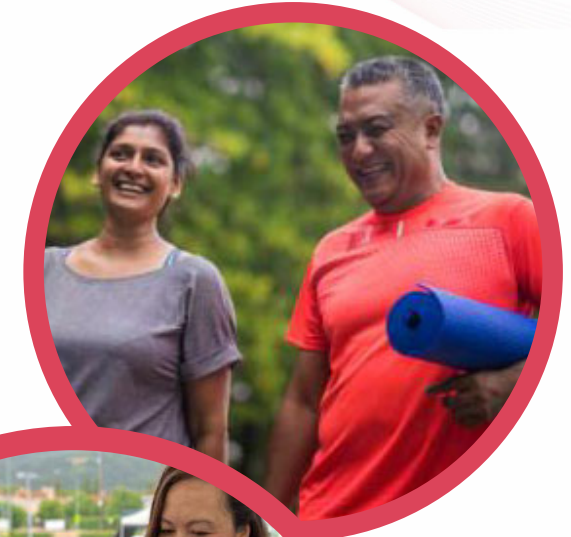
Strategy 1.3: Promote availability of cooling and clean air centers as places of respite from climate hazards such as extreme heat and unhealthy air quality.

Strategy 1.4: Explore partnerships to integrate type 2 diabetes prevention and wellness into schools.

Objective 2: Invest in culturally appropriate educational campaigns to encourage residents to make healthy choices.

Strategy 2.1: Raise awareness among populations most at risk for type 2 diabetes using an asset-based approach.

Strategy 2.2: Create type 2 diabetes prevention and wellness public messaging to increase participation in prevention strategies.



Focus Area

Policy and Advocacy





The **Policy and Advocacy** focus area is designed to look ahead and think about sustainability of the work via policy change, planning of the built environment, funding, and resources. The PHD's role in policy change is education, therefore, partners are crucial for the advocacy part of this focus area.

The PHD plans to seek out additional funding to sustain this work but welcome its partners to do the same as we all work toward collectively preventing type 2 diabetes.





Goal

Organize support for type 2 diabetes prevention and wellness policies and funding.

Objective 1: Shape policy changes and strengthen partnerships that support type 2 diabetes prevention and wellness.

- Strategy 1.1:** In partnership with the DPI Collaborative, identify best practices to inform local, state, and federal policy.
- Strategy 1.2:** In partnership with the DPI Collaborative, co-develop and implement a policy agenda.
- Strategy 1.3:** Support the planning of the built environment to encourage space for free physical activity.
- Strategy 1.4:** Increase the number of champions and decision makers who support securing sustainable funding and resources.



Conclusion

The DPWP Strategic Plan outlines strategies to change the trajectory of diabetes and its negative impacts on the health and wellbeing of SCC residents. Prevention and wellness are key components in reducing one's risk of type 2 diabetes. Prevention activities, coupled with health equity strategies, changes in health policy, advocacy, and sufficient funding provides communities with the resources they need to prevent the progression of type 2 diabetes. SDOH must be addressed at the community level, and medical services and public health prevention must be coordinated in ways that improve health outcomes and quality of life.

Call to Action

Through a collective impact model and innovative strategies, the burden of type 2 diabetes can be relieved for many in our community. Furthermore, cross-collaboration with key community partners is imperative to generate and sustain long-term positive outcomes for the most vulnerable in our community. Local decision makers, policy makers and community stakeholders play a key role in changing the status of diabetes in the county.

You can join the DPI Collaborative and partner with the DPWP to become part of the solution to address type 2 diabetes in Santa Clara County. To learn more, visit SCCPreventDiabetes.org.



Acknowledgements

The Diabetes Prevention and Wellness Program (DPWP) is grateful to the many community stakeholders, agencies, and colleagues that participated in and contributed to the strategic planning process to develop the 2023-2028 DPWP Strategic Plan.

County of Santa Clara Board of Supervisors

Supervisor Susan Ellenberg, President, District 4
Supervisor Sylvia Arenas, District 1
Supervisor Cindy Chavez, District 2
Supervisor Otto Lee, District 3
Supervisor Joe Simitian, District 5

County Executive

James R. Williams

Deputy County Executive and Director of Santa Clara Valley Health and Hospital System

Rocio Luna
Rene G. Santiago*

County of Santa Clara Public Health Department

Sara H. Cody, Health Officer and Public Health Director
Sarah Rudman, Deputy Health Officer
Rhonda McClinton-Brown, Deputy Director for Strategy, Policy, and Planning
Angelica Diaz, Director of Healthy Communities Branch

Diabetes Prevention and Wellness Program Team

Gabriela Camberos, Program Manager III
Iqra Karmally, Student Intern IV
Jaime Flores Ricci, Program Manager II
Lorna Sumaraga, Health Education Associate
Navdeep Dhillon, Health Planning Specialist III
Terrence Cole, Prevention Program Analyst II
Ava Nicole**
Helen Norman**
Yvette Barajas**

DPWP Graphic Design Team

Brandy Mattson, Health Education Specialist
Iqra Karmally, Student Intern IV

* Formerly with Santa Clara Valley Health and Hospital System

** Staff formerly with the Diabetes Prevention and Wellness Program

Acknowledgements

The Diabetes Prevention and Wellness Program (DPWP) is grateful to the many community stakeholders, agencies, and colleagues that participated in and contributed to the strategic planning process to develop the 2023-2028 DPWP Strategic Plan.

DPWP Strategic Planning Partners

American Diabetes Association

American Heart Association

Anthem Blue Cross

Asian American Center of Santa Clara County

Asian Americans for Community Involvement

Bay Area Community Health

Catholic Charities of Santa Clara County

City of Santa Clara

Community Health Partnership

County of Santa Clara Behavioral Health Services

County of Santa Clara Employee Wellness Department

County of Santa Clara Health Advisory Commission

County of Santa Clara Office of Education

County of Santa Clara Public Health Department

County of Santa Clara County Office of LGBTQ+

County of Santa Clara Office of the Sheriff

County of Santa Clara Social Services Agency

El Camino Health

First 5 Santa Clara County

Foothill College

Gardner Health Services

Grail Family Services

Healthier Kids Foundation

Malama Health

Mission College

O'Connor Hospital

Rebekah Children's Services

Roots Community Health Center

Santa Clara Family Health Plan

Santa Clara Valley Healthcare

Stanford University

Sunday Friends Foundation

The Health Trust

Valley Health Plan

YMCA of Silicon Valley

Glossary

Term	Definition
A1C:	Known as the hemoglobin A1C or HbA1c test; also referred to as a diabetes screening test. It is a simple blood test that measures your average blood sugar levels over the past 3 months. ⁵⁰
Best Practices:	In public health, a best practice is an intervention that has shown evidence of effectiveness in a particular setting and is likely to be replicable to other situations. ⁵¹
Capacity Building:	Expanding knowledge of an individual or organization to perform tasks and achieve common goals.
Clinic to Community Linkages:	Fill gaps in services to provide more holistic care to a person by building connections between both the clinical and community sectors.
Diabetic Retinopathy:	The leading cause of blindness in working-age adults. Diabetic retinopathy is caused when high blood sugar damages blood vessels in the retina. Damaged blood vessels can swell and leak, causing blurry vision or stopping blood flow. ⁵²
Diabetic Neuropathy:	Nerve damage that is caused by diabetes. Over time, high blood glucose levels, also called blood sugar, and high levels of fats, such as triglycerides, in the blood from diabetes can damage your nerves. Symptoms depend on which type of diabetic neuropathy you have. ⁵³
DPWP:	Diabetes Prevention & Wellness Program. As of 2022, the new name for PHD's diabetes prevention efforts.

Glossary

Term	Definition
DPI:	Diabetes Prevention Initiative. The name of PHD's original diabetes prevention efforts from 2016-2021.
Federal Poverty Level:	A measure of income issued every year by the Department of Health and Human Services (HHS). Federal poverty levels are used to determine your eligibility for certain programs and benefits. ⁵⁴
Gestational Diabetes:	A type of diabetes that occurs during pregnancy in women who do not already have diabetes. ⁵⁵
Glucose:	A simple type of sugar you get from foods you eat, and your body uses it for energy. As it travels through your bloodstream to your cells, it is called blood glucose or blood sugar. Glucose is measured to determine your risk for prediabetes or diabetes. ⁵⁶
Healthy Communities Branch:	A branch within the Santa Clara County Public Health Department that focuses on the health of communities within the county.
Health Disparities:	Preventable differences in the burden of disease, injury, violence, or opportunities to achieve optimal health that are experienced by socially disadvantaged populations. They are directly related to the historical and current unequal distribution of social, political, economic, and environmental resources. ⁵⁷

Glossary

Term	Definition
Health Equity:	The state in which everyone has a fair and just opportunity to attain their highest level of health. ⁵⁸
Heart Disease:	The leading cause of death in the United States. The term “heart disease” refers to several types of heart conditions. The most common type of heart disease is coronary artery disease (CAD), which can lead to heart attack. ⁵⁹
Key Informant:	Community leaders, professionals, or residents who have firsthand knowledge about the community. ⁶⁰
Needs Assessment:	Collecting information that provides a complete picture of your community’s needs and existing resources. ⁶¹
Obesity:	A complex disease involving an excessive amount of body fat. ⁶²
Prediabetes:	The stage when your blood sugar is higher than normal but not high enough for a diagnosis of type 2 diabetes. ⁶³
Prevalence:	Proportion of a population who have a specific characteristic in a given time period. ⁶⁴
Prevention:	To keep from happening or existing. ⁶⁵
Priority Populations:	Populations that are underserved and/or uniquely impacted by an identified health issue. Priority populations may be defined by demographic characteristics, geography, or another identifying characteristic.

Glossary

Term	Definition
Social Determinants of Health:	Conditions in the places where people live, learn, work, and play that affect a wide range of health and quality-of life-risks and outcomes. ⁶⁶
Sustainability:	The ability to be maintained at a certain rate or level. ⁶⁷
Stakeholders:	Individuals and organizations that have an interest in or are affected by your evaluation and/or its results. ⁶⁸
Strategic Plan:	A guiding document that shapes the work being done by an organization, program, or department by setting forth the vision, mission, guiding principles, values, and strategic priorities. ⁶⁹
Strategy:	A plan or approach designed to achieve a specific goal. ⁷⁰
Type 2 Diabetes:	A chronic medical condition characterized by high levels of glucose (sugar) in the blood due to the body's inability to properly produce or use insulin, a hormone produced by the pancreas. ⁷¹
Wellness:	The DPWP definition of wellness is "Wellness is not just surviving, it is thriving. Wellness is a balance of all aspects of a person's health: mental, emotional, physical, social, and spiritual. We can support a person's wellness through choices, freedom, knowledge (health literacy), resources, and providing a safe environment that promotes culture, diversity, and human connections. Wellness is an active process that we continually work towards to achieve joy, peace, wellbeing, and holistic health."

Appendices - Diabetes Data

List of Tables

Table 1. Community engagement	30, 57
Table 2. Environmental scan	34, 58
Table 3. Residents with diabetes	59
Table 4. Births with gestational diabetes	60
Table 5. Diabetes emergency department visits	61
Table 6. Diabetes hospitalizations	62
Table 7. Persons ever diagnosed with diabetes, by zip code	63
Table 8. By race and ethnicity	64
Table 9. Demographics indicators.....	65

List of Figures

Figure 1. Six stepping stones to wellness.....	05
Figure 2. Wellness Wave.....	11
Figure 3. Thirteen SCC Zip Codes with highest rates of diabetes	20
Figure 4. Prevalence in 18+	21
Figure 5. Three-step prevention strategy	22
Figure 6. BARHII framework	23
Figure 7. Six social determinants of health.....	24
Figure 8. DPWP definition of wellness.....	26
Figure 9. Six stepping stones, horizontal version.....	27
Figure 10. Wellness across the life course.....	28
Figure 11. Needs assessment methodology.....	29
Figure 12. Strategic planning vision and methodology.....	36

Diabetes Data in Santa Clara County

The data in the tables below include multiple diabetes indicators and disparities. The California Health Interview Survey (CHIS) is the primary source for the data presented in the tables. CHIS is an annual survey that collects comprehensive data on the health and health care needs of California residents. Limitations of CHIS data include gaps in prediabetes and gestational diabetes data, type 2 diabetes combined with type 1, individuals unaware of their prediabetes status, age of data, and that all the data from CHIS is self-reported.

Appendix A: Table 1 - Community Engagement Diabetes Data, Santa Clara County

Table 1

Community Engagement Activities in Santa Clara County Conducted as Part of the Needs Assessment (p. 30)

Timeline	Needs Assessment Activity	Activity Process and Focus
January 2022	1st Townhall - Kick off	The DPI focused on engaging providers, community agencies, and PHD staff. Attendees were part of focus groups in May and June 2022.
February 2022	2nd Townhall	Engaged persons who have lived experiences with prediabetes, type 2 diabetes, and utilizers of diabetes prevention programs. Discussion topics included prevention, wellness, feedback and reflection of current diabetes prevention efforts or gaps of program presence, and gaps in screening for diabetes (HbA1c testing).
February 2022	Spanish Focus Group	Facilitated a session in Spanish to engage community members in shared vision setting for the prevention of type 2 diabetes.
May 2022	Work Group	Facilitated two workgroups focused on health promotion and education.
May 2022	Work Group	Facilitated two workgroups focused on the integration of diabetes prevention services.
May and June 2022	Work Group	Facilitated two workgroups focused on access to early detection and follow up for diabetes.
June through August 2022	Key Informant Interviews	Conducted key informant interviews with healthcare providers and health leaders.

Appendix B: Environmental Scan of Diabetes Data, Santa Clara County (Table 2)

Table 2

Sources of Santa Clara County Information and Data Utilized in the Environmental Scan and Internal Analysis (p. 34)

Information/Data Source	Information/Data Utilized
California Health Interview Survey (CHIS) data, 2016-2022	Prevalence data for prediabetes and type 2 diabetes, demographic information, lifestyle habit information
2020 AskCHIS Neighborhood Edition	Diabetes by zip code
County of Santa Clara Public Health Department, California Integrated Vital Records System, 2006-2022 Births	Prevalence data for gestational diabetes
U.S. Census Bureau, 2012-2021 American Community Survey 5-year estimates	Santa Clara County demographic information
Santa Clara County Public Health Department, 2012-2021 Death Statistical Master File	Leading causes of death, diabetes deaths by demographics
County of Santa Clara Public Health Department Chronic Disease Prevention Strategic Plan, 2020-2024	Key learnings from plan and alignment with focus areas
T2020 Universal A1C Screening Pilot Report	Key learnings from pilot design and implementation
Healthy Communities Branch Diabetes Prevention and Wellness Inventory	Gaps in programming to address diabetes prevention and wellness

Appendix C: Table 3 - Percent of Residents with Diabetes, Santa Clara County

Table 3

Percent of Santa Clara County Residents With Diabetes

Indicator	Percentage	Source
Percent of SCC residents 18+ diagnosed with borderline diabetes*, 5 year pooled**	17.7 %	Source: 2016, 2017, 2018, 2021, 2022 California Health Interview Survey
Percent of diabetic SCC residents 18+ with Type 2 diabetes, 5 year pooled**	87.9 %	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey

*Borderline diabetes is in reference to prediabetes

**5 year pooled includes data from 2016-2022 (not including 2019 and 2020)

Appendix D: Table 4 - Percent of Births with Gestational Diabetes, Santa Clara County

Table 4

Percent of Births for Santa Clara County Residents Who Had Gestational Diabetes by Demographic 2010-2022

Indicator	2010	2014	2018	2019	2020	2021	2022	Source
Percent of births among all Santa Clara County residents that had gestational diabetes	5.2 %	8.1 %	10.6 %	11.3 %	13.5 %	13.0 %	14.1 %	Source: County of Santa Clara Public Health Department, California Integrated Vital Records System, 2006-2022 Births
Percent of all births among Asian/Pacific Islander SCC residents that had gestational diabetes	8.3 %	10.2 %	13.2 %	14.2%	16.7%	16.3%	18.0%	
Percent of births among all SCC residents ages 45 and older that had gestational diabetes	11.5%	11.8%	21.2	25.9	19.3	24.7	20.2	

Appendix E: Table 5 - Number of Diabetes Emergency Department Visits, Santa Clara County

Table 5

Number of Santa Clara County Diabetes Emergency Department Visits 2017-2021

Year	Count	Adjust Rate per 1000,000	Source
2017	34,157	1646.47	
2018	34,576	1648.5	
2019	39,697	1877.2	Source: HCAI Patient Discharge Data, 2017-2021
2020	34,544	1634	
2021	39,545	1873.4	

Appendix F: Table 6 - Number of Hospitalizations for Diabetes, Santa Clara County

Table 6
Number of Santa Clara County Diabetes Hospitalizations 2017-2021

Year	Count	Source
2017	29,508	
2018	28,317	
2019	29,420	Source: HCAI Patient Discharge Data, 2017-2021
2020	26,997	
2021	30,406	

Appendix G: Table 7 - Percent of Persons Ever Diagnosed with Diabetes (Ages 18+), Santa Clara County by Zip Code

Table 7

Percent of Persons Ever Diagnosed With Diabetes (ages 18+) by Santa Clara County Zip Code

Zip Code**	% Ever Diagnosed with Diabetes* (18+)	Source	Zip Code**	% Ever Diagnosed (18+)*	Source
95002	12.7 %		95122	12.6 %	
95013	11.3 %		95127	12.6 %	
95020	10.7 %	Source: 2020	95131	10.4 %	Source: 2020
95035	10.9 %	AskCHIS	95132	12.1 %	AskCHIS
95111	13.0 %	Neighborhood	95133	13.1 %	Neighborhood
95116	12.0 %	Edition			
95121	13.7 %		95148	12.9 %	

*Diabetes includes individuals with both type 1 and type 2 diabetes

**Zip codes listed are only those with 10% or higher ever diagnosed with diabetes (18+)

Appendix H: Table 8 - Santa Clara County Diabetes Data by Race/Ethnicity, 2021

Table 8

Santa Clara County Diabetes Data by Race/Ethnicity 2021

	Total County	Latino	White	African / African Ancestry	Asian	Source
Percent ever diagnosed with diabetes (includes type 1 and type 2)	8.8 %	11.4 %	4.7 %	Data not available	11.9 %	California Health Interview Survey, 2021
Percent ever diagnosed with prediabetes	21.6 %	24.5 %	17 %	Statistically unstable	23.5 %	
Percent of births for residents who had gestational diabetes	13 %	13.7 %	7.6 %	14 %	16.3 %	County of Santa Clara Public Health Department, California Integrated Vital Records System, 2006-2022 Births

Appendix I.1: Table 9 - Santa Clara County Diabetes Demographics Indicators

Table 9

Santa Clara County Diabetes Demographics Indicators (CHIS Survey)

Category	Indicator	Percentage	Source
Gender	Percent of male SCC residents 18+ with prediabetes/borderline diabetes	19.1 %	Source: 2022 California Health Interview Survey
	Percent of female SCC residents 18+ with prediabetes/borderline diabetes	16.4 %	Source: 2022 California Health Interview Survey
Age	Percent of all SCC residents 18-64 years old with prediabetes/borderline diabetes	12.8 %	Source: 2022 California Health Interview Survey
	Percent of all SCC residents 65+ year olds with prediabetes/borderline diabetes	42.9 %	Source: 2022 California Health Interview Survey
	Percent of all diabetic SCC residents 18-64 years old with Type II diabetes	85.4 %	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey
	Percent of all diabetic SCC residents 65+ years old with Type II diabetes	91.6 %	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey

(Table 9 continued on page 66)

Appendix I.2: Table 9 - Santa Clara County Diabetes Demographics Indicators (continued)

Table 9 (continued)

Santa Clara County Diabetes Demographics Indicators (CHIS Survey)

Category	Indicator	Percentage	Source
Annual Household Income per year for residents with prediabetes/ borderline diabetes	Percent of SCC residents 18+ with annual household income of \$5,000-\$20,000 per year who have prediabetes/borderline diabetes	24.9 %	Source: 2021, 2022 California Health Interview Survey
	Percent of SCC residents 18+ with annual household income of \$20,001-\$50,000 per year who have prediabetes/borderline diabetes	23.7 %	Source: 2021, 2022 California Health Interview Survey
	Percent of SCC residents 18+ with annual income of \$60,001 - \$100,000 per year who have prediabetes/borderline diabetes	19.7 %	Source: 2021, 2022 California Health Interview Survey
	Percent of SCC residents 18+ with annual income of over \$100,001 per year who have prediabetes/borderline diabetes	17.6 %	Source: 2021, 2022 California Health Interview Survey

(Table 9 continued on page 67)

Appendix I.3: Table 9 - Santa Clara County Diabetes Demographics Indicators (continued)

Table 9 (continued)

Santa Clara County Diabetes Demographics Indicators (CHIS Survey)

Category	Indicator	Percentage	Source
Annual Household Income per year for residents with Type 1 or 2 diabetes	Percent of SCC residents 18+ with annual household income of \$5,000-\$20,000 per year who have Type I or Type II diabetes	24.2 %	Source: 2021, 2022 California Health Interview Survey
	Percent of SCC residents 18+ with annual household income of \$20,001-\$50,000 per year who have Type I or Type II diabetes	13.5 %	Source: 2021, 2022 California Health Interview Survey
	Percent of SCC residents 18+ with annual income of \$60,001 - \$100,000 per year who have Type I or Type II diabetes	4.9 %	Source: 2021, 2022 California Health Interview Survey
	Percent of SCC residents 18+ with annual income of over \$100,001 per year who have Type I or Type II diabetes	6.0 %	Source: 2021, 2022 California Health Interview Survey

(Table 9 continued on page 68)

Appendix I.4: Table 9 - Santa Clara County Diabetes Demographics Indicators (continued)

Table 9 (continued)

Santa Clara County Diabetes Demographics Indicators (CHIS Survey)

Category	Indicator	Percentage	Source
Annual Household Income per year for residents with Type 1 or 2 diabetes	Percent of diabetic SCC residents 18+ with annual household income of \$5,000-\$20,000 per year who have Type II diabetes	Statistically unstable	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey
	Percent of diabetic SCC residents 18+ with annual household income of \$20,001-\$50,000 per year who have Type II diabetes	87.4 %	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey
	Percent of diabetic SCC residents 18+ with annual income of \$60,001 - \$100,000 per year who have Type II diabetes	Statistically unstable	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey
	Percent of diabetic SCC residents 18+ with annual income of over \$100,001 per year who have Type II diabetes	85.7 %	Source: 2018, 2019, 2020, 2021, 2022 California Health Interview Survey

Appendices - Figures

Appendix J: Figures 1-4

Figures	Source	Page No.
Fig. 1: The six stepping stones to wellness, vertical placement.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 5. March, 2024.	p. 5
Fig 2: "Riding the Wellness Wave" infographic featuring the six stepping stones to wellness.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 11. March, 2024.	p. 11
Fig. 3: Thirteen zip codes of Santa Clara County with diabetes incidence of 10% or more residents with diabetes.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 20. March, 2024.	p. 20
Fig. 4: Prevalence of Diabetes in Santa Clara County residents 18 and over, by Zip Code. 2020.	2020 AskCHIS Neighborhood Edition. http://healthpolicy.ucla.edu . County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 21. March, 2024.	p. 21

Appendix K: Figures 5-9

Figures	Source	Page No.
Fig. 5: Infographic of the three-step prevention strategy.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 22. March, 2024.	p. 22
Fig. 6: A Public Health Framework for Reducing Health Inequities - Bay Area Regional Health Inequities Initiative (BARHII).	A Public Health Framework for Reducing Health Inequities - Bay Area Regional Health Inequities Initiative (BARHII). County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 23. March, 2024.	p. 23
Fig. 7: Infographic depicting six social determinants of health.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 24. March, 2024.	pg. 24
Fig. 8: Infographic depicting the DPWP definition of wellness with a whole person care approach.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 26. March, 2024.	pg. 26
Fig. 9: DPWP's six stepping stones to wellness, horizontal version 2.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 27. March, 2024.	pg. 27

Appendix L: Figures 10-11

Figures	Source	Page No.
Fig 10: Infographic depicting wellness across the life course	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 28. March, 2024.	pg. 28
Fig 11: Infographic depicting DPWP needs assessment methodology.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 29. March, 2024.	pg. 29
Fig. 12: Infographic depicting DPWP strategic planning vision and methodology.	County of Santa Clara Public Health Department, Healthy Communities Branch, Diabetes Prevention and Wellness Program Strategic Plan 2023 - 2028, p. 36. March, 2024.	pg. 36

References

1. Cao, Z., Li, W., Wen, C.P., et al. (2023). Risk of death associated with reversion from prediabetes to normoglycemia and the role of modifiable risk factors. *JAMA Network Open*, 6(3): e234989. doi:10.1001/jamanetworkopen.2023.4989.
2. UCLA Center for Health Policy Research. (March 2016). Prediabetes in California: Nearly half of California adults on path to diabetes. <https://www.healthpolicy.ucla.edu/our-work/publications/Documents/PDF/2016/prediabetes-brief-mar2016.pdf>
3. County of Santa Clara. Fiscal Year 2017-18 Recommended Budget, page 530.
4. County of Santa Clara Public Health Department. 2012-2021 Death Statistical Master File.
5. American Heart Association. (2021, May 4). Diabetes complications and risks. <https://www.heart.org/en/health-topics/diabetes/diabetes-complications-and-risks>
6. Centers for Disease Control and Prevention. (2022, December 30). Gestational diabetes. <https://www.cdc.gov/diabetes/basics/gestational.html>
7. UCLA Center for Health Policy Research. (March 2016). Prediabetes in California: Nearly half of California adults on path to diabetes. <https://www.healthpolicy.ucla.edu/our-work/publications/Documents/PDF/2016/prediabetes-brief-mar2016.pdf>
8. County of Santa Clara. Fiscal Year 2017-18 Recommended Budget, page 530.
9. County of Santa Clara Public Health Department. 2012-2021 Death Statistical Master File.
10. County of Santa Clara Public Health Department. 2012-2021 Death Statistical Master File.
11. Centers for Disease Control and Prevention. (2023, August 1). What is national DPP? <https://www.cdc.gov/diabetes/prevention/what-is-dpp.htm>
12. American Diabetes Association. (n.d.). About diabetes. <https://diabetes.org/about-diabetes>
13. Centers for Disease Control and Prevention. (2023, April 4). Diabetes fast facts. <https://www.cdc.gov/diabetes/basics/quick-facts.html>
14. Centers for Disease Control and Prevention. (2023, August 1). About prediabetes and type 2 diabetes. <https://www.cdc.gov/diabetes/prevention/about-prediabetes.html>
15. Centers for Disease Control and Prevention. (2023, August 1). About prediabetes and type 2 diabetes. <https://www.cdc.gov/diabetes/prevention/about-prediabetes.html>
16. County of Santa Clara Public Health Department. 2012-2021 Death Statistical Master File.
17. UCLA Center for Health Policy Research. California Health Interview Survey, 2021.
18. UCLA Center for Health Policy Research. California Health Interview Survey, 2018-2022).
19. California Department of Health Care Access and Information Data. Patient Discharge Data, 2017-2021.
20. California Department of Health Care Access and Information Data. Patient Discharge Data, 2017-2021.
21. California Department of Health Care Access and Information Data. Patient Discharge Data, 2017-2021.
22. County of Santa Clara Public Health Department. 2012-2021 Death Statistical Master File.
23. Centers for Disease Control and Prevention. (2023, April 4). Diabetes fast facts. <https://www.cdc.gov/diabetes/basics/quick-facts.html>
24. UCLA Center for Health Policy Research. California Health Interview Survey, 2021.
25. Cao, Z., Li, W., Wen, C.P., et al. (2023). Risk of death associated with reversion from prediabetes to normoglycemia and the role of modifiable risk factors. *JAMA Network Open*, 6(3): e234989. doi:10.1001/jamanetworkopen.2023.4989.

References

26. UCLA Center for Health Policy Research. California Health Interview Survey, 2021-2022.
27. UCLA Center for Health Policy Research. California Health Interview Survey, 2022.
28. UCLA Center for Health Policy Research. California Health Interview Survey, 2022.
29. UCLA Center for Health Policy Research. California Health Interview Survey, 2016, 2017, 2018, 2021, 2022).
30. Centers for Disease Control and Prevention. (2022, December 30). Gestational diabetes. <https://www.cdc.gov/diabetes/basics/gestational.html>
31. County of Santa Clara Public Health Department. California Integrated Vital Records System, 2006-2022 Births.
32. Office of the Assistant Secretary for Planning and Evaluation. (2024, January 17). Poverty guidelines. U.S. Department of Health and Human Services. <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines>
33. UCLA Center for Health Policy Research. AskCHIS Neighborhood Edition, 2020.
34. Centers for Disease Control and Prevention. (n.d.) Prevention. https://www.cdc.gov/pictureofamerica/pdfs/picture_of_america_prevention.pdf
35. Kisling L.A., Das J.M. (2023). Prevention strategies. StatPearls, <https://www.ncbi.nlm.nih.gov/books/NBK537222/>
36. U.S. Census Bureau, 2017-2021 American Community Survey 5-year estimates
37. U.S. Census Bureau, 2017-2021 American Community Survey 5-year estimates
38. U.S. Census Bureau, 2017-2021 American Community Survey 5-year estimates
39. Office of the Assistant Secretary for Planning and Evaluation. (n.d.). 2021 percentage poverty tool. U.S. Department of Health and Human Services. https://aspe.hhs.gov/sites/default/files/private/aspe-files/107166/2021-percentage-poverty-tool_0.pdf
40. U.S. Census Bureau, 2017-2021 American Community Survey 5-year estimates
41. Silicon Valley Institute for Regional Studies. (n.d.). Average annual earnings. Joint Venture Silicon Valley. <https://siliconvalleyindicators.org/data/economy/income/personal-income/average-annual-earnings/>
42. Silicon Valley Institute for Regional Studies. (n.d.). Median wages for various occupational categories. Joint Venture Silicone Valley. <https://siliconvalleyindicators.org/data/economy/income/wages/median-wages-for-various-occupational-categories/>
43. UCLA Center for Health Policy Research. California Health Interview Survey, 2022.
44. UCLA Center for Health Policy Research. California Health Interview Survey, 2022.
45. UCLA Center for Health Policy Research. California Health Interview Survey, 2020.
46. UCLA Center for Health Policy Research. California Health Interview Survey, 2020.
47. County of Santa Clara Public Health Department. Chronic Disease Strategic Plan, 2020-2024.
48. Agency for Healthcare Research and Quality. (2016, December). Clinical-community linkages. U.S. Department of Health and Human Services. <https://archive.ahrq.gov/ncep/pcr/tools/community/index.html>
49. Centers for Disease Control and Prevention. (2016, December). Community-clinical linkages for the prevention and control of chronic diseases: A practitioner's guide. <https://www.cdc.gov/dhds/pubs/docs/ccl-practitioners-guide.pdf>

References

50. Centers for Disease Control and Prevention. (2022, September 30). All about your A1c. <https://www.cdc.gov/diabetes/managing/managing-blood-sugar/a1c.html>
51. Ng, E., de Colombani, P. (2015). Framework for selecting best practices in public health: A systematic literature review. *Journal of Public Health Research*, 4(3), 577. doi: 10.4081/jphr.2015.577.
52. Centers for Disease Control and Prevention. (2021, August 10). Review: Diabetic retinopathy. <https://www.cdc.gov/visionhealth/vehss/data/studies/diabetic-retinopathy.html>
53. Centers for Disease Control and Prevention. (2022, June 20). Diabetes and nerve damage. <https://www.cdc.gov/diabetes/library/features/diabetes-nerve-damage.html>
54. HealthCare.gov. (n.d.) Federal poverty level (FPL). <https://www.healthcare.gov/glossary/federal-poverty-level-fpl/>
55. Centers for Disease Control and Prevention. (2022, December 30). Gestational diabetes. <https://www.cdc.gov/diabetes/basics/gestational.html>
56. Centers for Disease Control and Prevention. (2023, September 5). What is diabetes? <https://www.cdc.gov/diabetes/basics/diabetes.html>
57. Centers for Disease Control and Prevention. (2017, January 31). Health disparities. <https://www.cdc.gov/aging/disparities/index.htm>
58. Centers for Disease Control and Prevention. (2022, July 1). What is health equity? <https://www.cdc.gov/healthequity/whatis/index.html>
59. Centers for Disease Control and Prevention. (2024, January 9). Heart disease. <https://www.cdc.gov/heartdisease/index.htm>
60. UCLA Center for Health Policy Research. (n.d.) Section 4: Key informant interviews. https://healthpolicy.ucla.edu/programs/health-data/trainings/Documents/tw_cba23.pdf
61. U.S. Department of Health & Human Services. (2016, June 9). Step 1: Needs Assessment. <https://www.hhs.gov/guidance/document/step-1-needs-assessment>
62. Mayo Clinic. (2023, July 22). Obesity. <https://www.mayoclinic.org/diseases-conditions/obesity/symptoms-causes/syc-20375742>
63. Centers for Disease Control and Prevention. (2023, August 1). About prediabetes and type 2 diabetes. <https://www.cdc.gov/diabetes/prevention/about-prediabetes.html>
64. National Institute for Mental Health. (n.d.). What is prevalence? (<https://www.nimh.nih.gov/health/statistics/what-is-prevalence>)
65. Merriam Webster. (2024, March 5). Prevent. <https://www.merriam-webster.com/dictionary/preventing>
66. Centers for Disease Control and Prevention. (2022, December 8). Social Determinants of Health at CDC. <https://www.cdc.gov/socialdeterminants/index.htm>
67. Microsoft Bing. (n.d.). Sustainability definition. <https://www.bing.com/search?q=sustainability%20definition&q&form=QBRE&=&eManage%20Your%20Search%20History%25E&sp=-1&ghc=2&pg=sustainability%20defin&sc=8-20&sk=&cvd=F7934DD34DC948E8A64CE5296B21B7FC&ghsh=0&ghacc=1&ghpl=undefined>
68. Centers for Disease Control and Prevention. (n.d.). Identifying and determining involvement of stakeholders. <https://www.cdc.gov/std/Program/pupestd/Identifying%20and%20Determining%20Stakeholders.pdf>
69. Health Accreditation Board. (n.d.) Getting started. <http://www.phaboard.org/accreditation-overview/getting-started/>
70. Merriam-Webster. (2024, February 24). Strategy definition. <https://www.merriam-webster.com/dictionary/strategy>
71. Centers for Disease Control and Prevention. (2023, April 18). Type 2 diabetes. <https://www.cdc.gov/diabetes/basics/type2.html>



Together, We Can Prevent Type 2 Diabetes.

Santa Clara County
**PUBLIC
HEALTH**

SCCPreventDiabetes.org

