



Hawai'i Diabetes Plan 2030

INTRODUCTION

Diabetes is a chronic health condition that can increase a person's risk for serious illness and death. More than 7 million Americans with diabetes have never been diagnosed, potentially missing out on essential healthcare for their disease.¹ People with uncontrolled diabetes may experience blindness, kidney failure, heart attack, or stroke. Uncontrolled diabetes also puts a person at greater risk of serious complications from the flu and COVID-19. The current obesity epidemic has largely contributed to the rapidly increasing rates of diabetes and prediabetes.

The Hawai'i Diabetes Plan (HDP) 2030 represents a coordinated effort between stakeholders and partners throughout the state who worked together to develop objectives and strategies that utilize data, best practices, and evidence-based science. The resulting HDP 2030 reflects a common vision for preventing and managing diabetes to help the people of Hawai'i, especially those most at-risk, lead healthy lives.

The HDP 2030 works in coordination with other chronic disease prevention and management efforts in the state, specifically the Healthy Hawai'i Strategic Plan 2030; the Hawai'i Asthma Plan 2030; the Hawai'i Cancer Plan 2030; the Hawai'i Heart Disease and Stroke Plan 2030; the Hawai'i Physical Activity and Nutrition Plan 2030; and the Hawai'i Tobacco Prevention and Control Plan 2030.





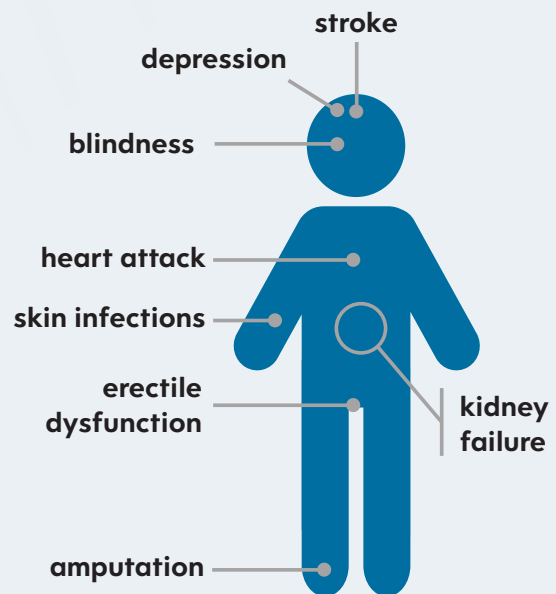
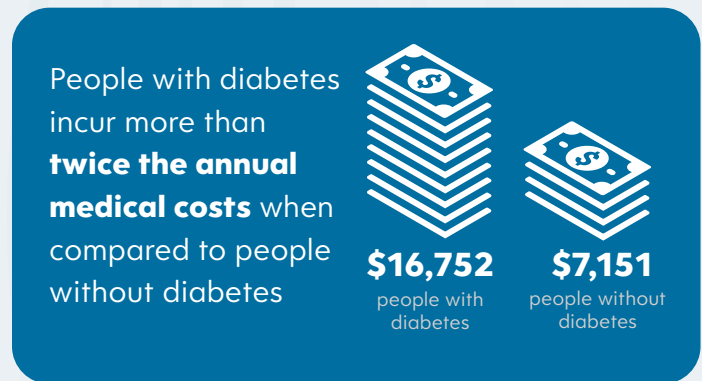
BACKGROUND

In the 2018 Hawai'i BRFSS, 14% of adults in the state reported that they were diagnosed with prediabetes and 12% reported that they were diagnosed with diabetes.² According to the Centers for Disease Control and Prevention, 80% of people with prediabetes and 20% of people with diabetes are unaware of their conditions, suggesting that the true prevalence of prediabetes and diabetes is much higher.³ Diabetes costs Hawai'i \$1.1 billion in direct healthcare expenditures and is currently the 8th leading cause of death in the state.^{4,5} Nearly one in every four healthcare dollars goes toward the care of people with diabetes.⁶ On average, people with diabetes incur more than twice the medical costs of people without diabetes.

Significant challenges in diabetes disease management persist throughout the nation and in Hawai'i. Clinical data from the state suggest that a substantial percentage of individuals diagnosed with diabetes have poorly controlled conditions (i.e. A1c>9.0%). For example, Health Resources and Services Administration (HRSA) data indicate that almost 35% of Federally Qualified Health Centers' (FQHC) diabetic patients have uncontrolled diabetes. Similarly, 2016 Physician Quality Reporting System data shows that 30% of diabetic patients have poorly managed A1c levels.

Prediabetes is a condition where blood sugar is higher than normal, but not yet high enough to be diagnosed as diabetes. Without intervention, over a five-year period, 15% to 30% of people with prediabetes will develop diabetes.⁷ The three types of diabetes are type 1, type 2, and gestational diabetes. In type 1 diabetes, a person's body does not make insulin to control blood sugar levels. In type 2 diabetes, a person's body may not make enough insulin or use the insulin well. Type 2 diabetes is the most common type and is typically associated with obesity and a lack of physical activity. Gestational diabetes develops in some women during pregnancy and usually goes away after the baby is born. However, studies show that women who have had gestational diabetes are at greater risk of developing type 2 diabetes later in life.

While some risk factors, such as one's ethnicity, age, and family history of diabetes, cannot be changed, other risk factors are modifiable. People who are overweight, obese, or physically inactive are at greater risk of developing diabetes, so lifestyle changes that reduce weight and increase physical activity can help to prevent or delay the onset of diabetes. Smokers are also 30% to 40% more likely than non-smokers to develop diabetes.⁸ To prevent diabetes smokers should quit and non-smokers should never start smoking.



Complications from diabetes

15–30%

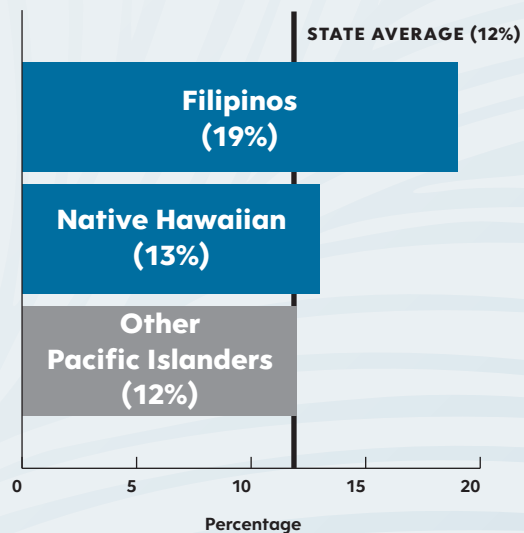
of those with prediabetes will **develop type 2 diabetes** in 5 years (without intervention)



PRIORITY POPULATIONS

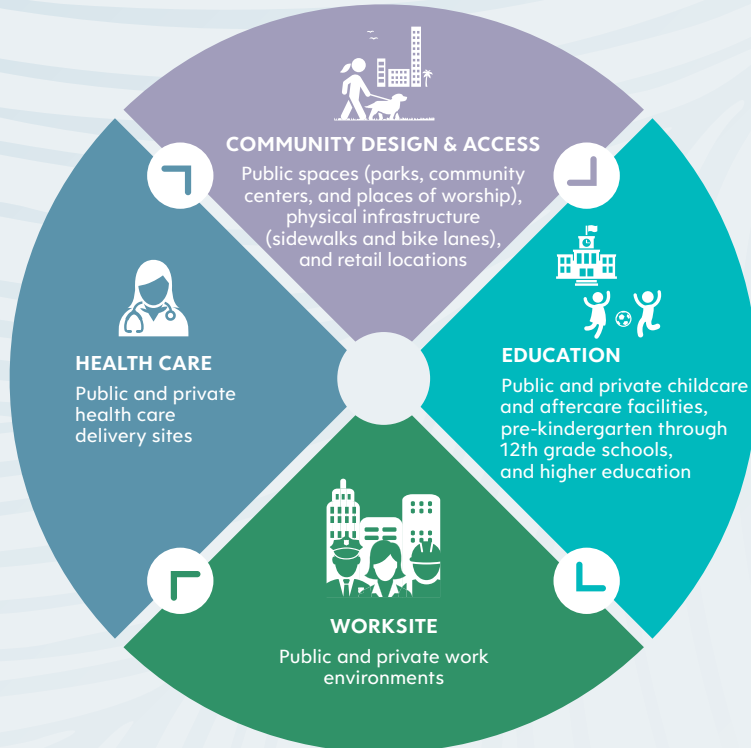
Health disparities are prevalent in diabetes and many chronic diseases. In Hawai'i, Filipinos, Native Hawaiians, and Other Pacific Islanders are at greater risk of developing diabetes.⁹ According to the most recent BRFSS survey data, 19% of Filipinos report being told that they have diabetes.² This is significantly greater than the state average of 12%. Similarly, Native Hawaiians were slightly more likely (13% vs. 12%) to be told by a health professional that they have diabetes. Native Hawaiians are also 22% more likely to die from diabetes when compared to the rest of the United States.¹⁰ In addition to ethnic health disparities, diabetes disproportionately affects low-income people, including those receiving Medicaid coverage. Currently, 18% of Hawai'i's 1.4 million residents are on Medicaid.¹¹

Diabetes Among Filipinos, Native Hawaiians, Other Pacific Islanders in Hawai'i



PLAN FRAMEWORK

The HDP 2030 incorporates principles of the Social Ecological Model and is organized into four sector areas: Community Design and Access, Education, Health Care, and Worksite. The plan prioritizes goals, objectives, and strategies that lead to policy, systems, and environmental change. Objectives were developed using current data, best practices, and evidence-based science, and reflect one or more cross-cutting themes.*



SECTOR AREAS

Places (both physical & virtual) where policy, systems, and environmental change can be established to support the formation and maintenance of healthy behaviors, achieving health equity, and maximizing chronic disease prevention, management, and treatment.

» POLICY, SYSTEMS AND ENVIRONMENTAL CHANGE

Integral to the framework and design of the HDP 2030 is the focus on policy, systems, and environmental change. The plan’s long-term goals, objectives, and strategies were developed to align with national guidelines and recommendations and to reflect or lead to policy, systems, or environmental change.

POLICY	SYSTEMS	ENVIRONMENTAL
<p>Policies at the legislative or organizational level.</p> <p>Institutionalizing new rules or procedures as well as passing laws, ordinances, or resolutions are examples of policy changes.</p>	<p>Changes made to rules within an organization.</p> <p>Systems change and policy change often work hand-in-hand. Often systems change focuses on changing infrastructure within a school, park, worksite, or health setting.</p>	<p>Changes that are made to the physical/built environment.</p> <p>Physical (structural changes or programs or service), social (a positive change in attitudes or behavior about policies that promote health) and economic factors (presence of financial disincentives or incentives to encourage a desired behavior).</p>

*Additional information on the plan framework can be found at the following website: www.HHSP.hawaii.gov



Objectives and Strategies

The HDP 2030 objectives strive to create sustainable change that will transform our communities, schools, health care, and worksites to enhance diabetes prevention and management efforts and support the health of the people of Hawai'i. Stakeholders developed the HDP 2030 objectives to shape policy, systems and environmental change in the four sector areas: Community Design and Access; Education; Health Care; and Worksite. The objectives are showcased by sector area and include key strategies, baseline, and target measures. The HDP 2030 is meant to be a living document that is reviewed and updated throughout the plan's timeframe. Implementation of the plan will be a collective effort by individuals and organizations across the state.

*Additional background information, including definitions of some terminology used in the objectives and strategies, can be found at the following website: www.HHSP.hawaii.gov



Objectives with this icon are being worked on by multiple program areas.



Community Design and Access Sector Objectives

GOAL >> All of Hawai'i's people will live in communities that have access to tobacco- and nicotine-free settings, healthy food choices, physical activity opportunities, evidence-based chronic disease self-management programs, and minimal exposure to unhealthy options through policy, programs, communications, and environmental supports.

OBJECTIVE

BASELINE: 0 TARGET: 1

DIABETES-01

Establish at least one fully recognized National Diabetes Prevention Program site in the State of Hawai'i that provides online or distance learning.

STRATEGIES

- Support new organization(s) with the capacity to deliver the Diabetes Prevention Program (DPP) virtually or via telehealth by facilitating and maintaining access to necessary technology
- Provide technical assistance to organizations in obtaining distance and hybrid National Diabetes Prevention Program (NDPP) CDC recognition
- Connect referring organizations to distance learning DPP sites

OBJECTIVE

BASELINE: 19 TARGET: 22

DIABETES-02

Establish at least three new American Diabetes Association recognized or Association of Diabetes Care and Education Specialists accredited Diabetes Self-Management Education and Support sites.

STRATEGIES

- Support new organizations seeking recognition or accreditation by covering the application fees on a once-in-a-lifetime basis and providing technical assistance
- Collaborate with American Diabetes Association, Association of Diabetes Care and Education Specialists, and local Diabetes Self-Management Education and Support (DSMES) sites to provide training and mentoring to new organizations



Health Care Sector Objectives

GOAL >> All of Hawai'i's health care systems will promote health equity and maximize utilization of prevention, early detection, and evidence-based chronic disease self-management services by improving coverage, health information technology, programs, practices, and guidelines.

OBJECTIVE

BASELINE: 0 TARGET: 6

DIABETES-03

ASTHMA-06 • HEART DISEASE AND STROKE-06

By 2025, identify six Health Information Technology priorities to enhance population health.

STRATEGIES

- Identify key Health Information Technology (HIT) stakeholders to establish a HIT workgroup
- Convene HIT workgroup regularly to identify the HIT priorities to enhance population health

OBJECTIVE

BASELINE: 0 TARGET: 50%

DIABETES-04

ASTHMA-07 • HEART DISEASE AND STROKE-07

Meet 50% of identified Health Information Technology priority goals.

STRATEGIES

- Implement priorities identified by the HIT workgroup (e.g., implement bidirectional referral systems between health care organizations and self-management education programs or create a GIS map of chronic disease cases to inform targeted health communication and resource utilization)

OBJECTIVE

BASELINE: 0 TARGET: 5

DIABETES-05



ASTHMA-08 • HEART DISEASE AND STROKE-03

By 2025, identify five measurable outcomes indicative of team-based care and monitor over time.

STRATEGIES

- Identify key stakeholders to establish a team-based care workgroup
- Convene team-based care workgroup regularly to identify measurable outcomes indicative of team-based care
- Report identified outcomes at least annually

OBJECTIVE

BASELINE: Pending TARGET: Increase by 5%

DIABETES-06



ASTHMA-09 • HEART DISEASE AND STROKE-04

Improve identified measurable team-based care outcomes by 5%.

STRATEGIES

- Implement priorities identified by the team-based care workgroup (e.g., increase use of pharmacists in medication management to increase physical patient panels, increase use of non-physician telehealth for Asthma Self-Management (ASME), or increase use of Community Health Workers (CHW) in patient care coordination)



Worksite Sector Objectives

GOAL >> All of Hawai'i's worksites will create a culture of wellness through supportive programs and policies that promote tobacco-and nicotine-free workplaces; breastfeeding; healthy food and beverage choices; physical activity and active commuter opportunities; health screenings; and early detection, risk reduction, and self-management of chronic diseases.

OBJECTIVE

DIABETES-07

ASTHMA-11 • CANCER-13 • HEART DISEASE AND STROKE-09
PHYSICAL ACTIVITY AND NUTRITION-19 • TOBACCO-12

Implement a statewide, comprehensive worksite wellness recognition program that at least 10 very small-, 15 small-, 10 medium-, and 5 large-employers will participate in.

STRATEGIES

- Identify stakeholders and convene an advisory group to develop a Hawai'i-specific, evidence-based worksite wellness recognition program that includes the following areas:
 - Asthma
 - Cancer
 - Diabetes
 - Heart Disease and Stroke
 - Physical Activity and Nutrition
 - Tobacco
- Pilot the recognition program with a group of diverse employers and modify the program based on their feedback.

BASELINE:

very small = 0
small = 0

medium = 0
large = 0

TARGET:

very small = 10
small = 15

medium = 10
large = 5



IMPLEMENTATION

The rapidly increasing prevalence of chronic diseases and their associated risk factors in Hawai'i demands effective coordination of chronic disease prevention and management efforts. Statewide collaboration between stakeholders and partners reduces duplication of efforts and leverages resources to effectively address common risk factors through evidence-based policies, programs, and services. Stakeholders are convened regularly to discuss progress towards achieving the Diabetes objectives and strategies in the *Healthy Hawai'i Strategic Plan 2030 (HHSP)* and to monitor and evaluate progress. The stakeholder group will continue to expand membership to include new, community representatives and to assure an inclusive, and community-based participatory approach. For a comprehensive overview of the common plan framework and statewide goals to prevent and manage diabetes and other chronic diseases, please refer to the HHSP at www.HHSP.hawaii.gov.

LONG-TERM MEASURES

The long-term measures were identified to summarize and evaluate progress toward achieving the HDP 2030 objectives. The long-term measures will be monitored throughout the decade to demonstrate improvements in diabetes prevention and control. Long-term measures will be reviewed and updated periodically as changes are made to the HDP 2030.

LONG-TERM MEASURE	BASELINE	TARGET
Diabetes death rate - multiple cause of death	60.1 per 100,000 (DOH Vital Statistics, 2018)	52.9 per 100,000
New cases of diabetes	7.6 per 1,000 (CDC Diabetes Atlas, 2015)	5.6 per 1,000
Diabetes test in the past 3 years (ages 40-70, BMI over 25)	65.3% (BRFSS, 2018)	73.1%
People with diagnosed diabetes who received formal diabetes education	56.0% (BRFSS, 2016)	63.8%
People with diabetes with an A1c greater than 9	34.9% (UDS, 2019)	31.1%



PARTNERS

Thank you to the stakeholders and organizations across the state who contributed to the development of this plan by offering valuable input, expertise, and guidance.

- » Carl Barton, Derigo Health
- » Naomi Fukuda, The Queen's Medical Center, West O'ahu
- » Joseph Humphry, MD, Internal Medicine Physician
- » Bryan Juan, Hawai'i Primary Care Association
- » Alan Parsa, MD, The Queen's Medical Center, West O'ahu
- » Christina Simmons, YMCA of Honolulu
- » Cristina Vocalan, Hawai'i Primary Care Association
- » Don Weisman, American Heart Association
- » Brian Wu, MD, Hawaii Medical Service Association

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- ¹¹ “Medicaid in Hawaii.” Henry J. Kaiser Family Foundation, 29 April, 2020, <http://files.kff.org/attachment/fact-sheet-medicare-state-HI>

The Hawai'i Diabetes Plan 2030 works in coordination with other chronic disease prevention and management plans in the state, specifically the following:

- Healthy Hawai'i Strategic Plan 2030
- Hawai'i Asthma Plan 2030
- Hawai'i Cancer Plan 2030
- Hawai'i Heart Disease and Stroke Plan 2030
- Hawai'i Physical Activity and Nutrition Plan 2030
- Hawai'i Tobacco Prevention and Control Plan 2030





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The HDP 2030 can be accessed, downloaded, and interacted with
at the following website: www.HHSP.hawaii.gov

Non Discrimination in Services

We provide access to our programs and activities without regard to race, color, national origin, language, age, sex, religion, or disability. Write or call the Chronic Disease Prevention and Health Promotion Division or our Affirmative Action Officer at P.O. Box 3378, Honolulu Hawaii 96801-3378 or (808) 586-4110 (voice/TTY) within 180 days of a discrimination incident.