Healthy Hawai‘i
Strategic Plan 2030
Acknowledgement of Partners

Thank you to the many partners and community stakeholders across the state of Hawai‘i who devoted their time and effort to the creation of the Healthy Hawai‘i Strategic Plan 2030. Please reference the “Partners” section for additional information about the diverse and hardworking individuals and organizations involved.

Mōhala i ka wai ka maka o ka pua

Unfolded by the water are the faces of flowers. Flowers thrive where there is water, as thriving people are found where living conditions are good.

‘ŌLELO NO‘EAU # 2178
Aloha kākou,

The Healthy Hawai‘i Strategic Plan 2030 (HHSP) provides a roadmap for preventing and reducing the burden of chronic disease in our state. The HHSP is both timely and vital due to the ongoing impact of the COVID-19 pandemic on our country, state, and the people of Hawai‘i. The HHSP provides a comprehensive pathway forward to ensure that all residents of Hawai‘i can live healthier lives without complications from chronic disease. The disproportionate impact of COVID-19 on some of our communities in Hawai‘i amplifies the urgency for systemic approaches to reduce new cases of chronic disease and to normalize managing existing conditions.

The HHSP is a guide to enable coordination across common risk factors, interventions, and strategies. A large and diverse group of stakeholders contributed their expertise covering asthma, cancer, diabetes, heart disease and stroke, physical activity and nutrition, and tobacco programs. The HHSP was developed during historic times, while stakeholders adjusted organizationally and personally to teleworking and COVID-19 safety measures. The contributors are from communities across the state, from public, private, non-profit, and volunteer organizations, and through the pandemic they remained engaged in planning for the future.

The pandemic revealed areas of susceptibility in our current health system infrastructure and achieving health equity must continue to be part of our recovery and ongoing endeavors. What would a future look like where the healthy choice is the easy choice for all people in Hawai‘i? The plan identifies priority objectives in four sector areas—Community Design and Access, Education, Health Care, and Worksite. Working on health priorities in these sector areas will create sustainable changes where people live, learn, work, and play, so healthy options become the default. This is a living document, and I welcome our partners—present and future—to work together to achieve the “Healthy Hawai‘i Vision 2030.”

Sincerely,

Elizabeth A. Char, M.D.
Director,
Hawai‘i State Department of Health

The HHSP can also be accessed, downloaded, and interacted with at the following website: www.HHSP.hawaii.gov
Healthy People, Healthy Communities, Healthy Hawai‘i
# Table of Contents

Message from the Director ........................................................................................................ 3  
Introduction ................................................................................................................................... 6  
Vision, Mission, and Goals ........................................................................................................... 7  
Healthy Hawai‘i Vision 2030 ........................................................................................................ 8  
About the Healthy Hawai‘i Strategic Plan 2030 ........................................................................ 9  
- Purpose of Plan ......................................................................................................................... 9  
- Plan Framework ....................................................................................................................... 9  
  - Social Ecological Model ....................................................................................................... 10  
  - Policy, Systems and Environmental Change ...................................................................... 10  
  - Cross-Cutting Themes ........................................................................................................ 11  
  - Sector Areas ....................................................................................................................... 12  
  - Program Areas .................................................................................................................. 13  
Objectives and Strategies ............................................................................................................ 14  
- Community Design and Access Sector Objectives ............................................................... 15  
- Education Sector Objectives ............................................................................................... 22  
- Health Care Sector Objectives ............................................................................................ 26  
- Worksite Sector Objectives ................................................................................................. 32  
Background ................................................................................................................................... 35  
- Priority Populations ................................................................................................................ 36  
- Achieving Health Equity ........................................................................................................ 37  
- Asthma ...................................................................................................................................... 38  
- Cancer ..................................................................................................................................... 40  
- Diabetes ................................................................................................................................. 42  
- Heart Disease and Stroke ...................................................................................................... 44  
- Physical Activity and Nutrition ............................................................................................. 46  
- Tobacco ..................................................................................................................................... 50  
How the Plan was Developed ....................................................................................................... 52  
Implementation ............................................................................................................................. 53  
Long-term Measures .................................................................................................................. 53  
Partners ......................................................................................................................................... 58  
List of Acronyms ........................................................................................................................ 60  
References ..................................................................................................................................... 61
INTRODUCTION

The COVID-19 pandemic underscores the need for investing in chronic disease prevention, and innovative policy, systems, and environmental change that will impact health and health equity in Hawai‘i. People of any age with chronic diseases, underlying medical conditions, and those who smoke are at increased risk for severe illness from COVID-19. A study in the Journal of the American Heart Association, published in 2021, estimated almost two-thirds of COVID-19 hospitalizations in the U.S. to be attributed to obesity, diabetes, hypertension, and heart failure.

In 2019, 64% of adults in Hawai‘i had one or more chronic conditions.1 The annual costs of chronic diseases in Hawai‘i are projected to be $9 billion in direct medical costs and an additional $3.2 billion in indirect costs due to lost employee productivity (average per year 2016–2030).2 If the current trend continues, by 2030 the projected cost per Hawai‘i resident would be $8,300 per year.2

Through better prevention and treatment of chronic diseases, these projected rates can be significantly reduced.2 Additionally, minimizing preventable hospitalizations would improve health equity, reduce health care costs, and prevent overwhelming the state’s health care system during crises such as the COVID-19 pandemic.

The HHSP represents a coordinated effort between public, private, and community-based organizations, subject matter experts, public health advocates, health care professionals, educators, policy makers, and community representatives throughout the state. These partners worked together to develop objectives and strategies that utilize data, best practices, and evidence-based science. The resulting HHSP represents a common vision and guide for preventing and managing chronic disease, and ensuring that the people of Hawai‘i, especially the most at-risk populations, can lead healthy lives.

The COVID-19 pandemic has brought to the forefront the importance of chronic disease prevention and management, and has showcased how inequities impact not only the health of individuals, but of our communities.
VISION
Healthy People, Healthy Communities, Healthy Hawai‘i

MISSION
Shape environments, policies, and systems to support wellness and improve the quality and years of life for Hawai‘i’s people

GOALS
» Improve health and wellness.
» Decrease premature death and disability from chronic disease.
» Increase quality of life years among Hawai‘i residents.
» Reduce health disparities.
HEALTHY HAWAIʻI VISION 2030

The Healthy Hawaiʻi Vision 2030 represents a future where every person in Hawaiʻi has the opportunity to attain their full health potential. The framework of the HHSP recognizes that conditions in the places where people live, learn, work, and play are major contributing factors for health risks and outcomes.

These conditions are known as social determinants of health. The HHSP addresses the social determinants of health and achieving health equity through its focus on policy, systems, and environmental change in the four sector areas (Community Design and Access, Education, Health Care, and Worksite). The objectives assume there will be collective effort by partners to change policies, build health sustaining environments, and create meaningful connectedness across systems.
ABOUT THE HEALTHY HAWAI‘I STRATEGIC PLAN 2030 (HHSP)

Purpose of the Plan
The HHSP provides a comprehensive approach to realize a common vision of a healthy future for the people of Hawai‘i. The HHSP promotes the following:

- Innovative collaborations and non-traditional partnerships to improve health equity and to reach remote, vulnerable, and underserved populations;
- Resource sharing to minimize redundancies and safeguard sustainability;
- Use of evidence-based strategies to ensure efforts are driven by data, research, and evaluation; and
- Participation and leadership to encourage individuals and organizations to identify their areas of strength, roles and responsibilities, and possible contributions to improve the health of Hawai‘i’s people.

Plan Framework
The HHSP 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. Stakeholders utilized this common framework to develop objectives covering the program areas of asthma, cancer, diabetes, heart disease and stroke, physical activity and nutrition, and tobacco.
» **SOCIAL ECOLOGICAL MODEL**

To align with national priorities and direction, the HHSP relies on the Social Ecological Model. This model recognizes the interwoven relationship that exists between the individual and their environment. While individuals are responsible for maintaining a healthy lifestyle, behavior can be largely determined by the environment in which they live through social norms, attitudes, and public policies. Effective chronic disease prevention programs should address multiple levels of the model with attention on policy, systems, and environmental change.

![Social Ecological Model Diagram](image)

» **POLICY, SYSTEMS AND ENVIRONMENTAL CHANGE**

Integral to the framework and design of the HHSP 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**
  - Policies at the legislative or organizational level.
  - Institutionalizing new rules or procedures as well as passing laws, ordinances, or resolutions are examples of policy changes.

- **SYSTEMS**
  - Changes made to rules within an organization.
  - 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.

- **ENVIRONMENTAL**
  - Changes that are made to the physical/built environment.
  - 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).
## CROSS-CUTTING THEMES

After review of evidence-based practices for chronic disease prevention, program staff and partners identified six cross-cutting themes to recur frequently throughout the plan.

Objectives in the HHSP were developed to reflect one or more of these cross-cutting themes:

| **Epidemiology, Surveillance, and Evaluation** | Epidemiology, surveillance, and evaluation should be used to understand the effectiveness and progress in achieving a plan’s goals and objectives. Data should be utilized to monitor progress, address gaps in health improvements, and prioritize next steps. |
| **Quality of Life** | Quality of life can encompass many areas of life, such as psychological well-being, social life, support system, health status and function, and functional or career well-being. |
| **Community Clinical Linkages** | Community clinical links help ensure that people with or at high risk of chronic diseases have access to the resources they need to prevent or manage these diseases. Improved links between the community and clinical setting offer community delivery of proven programs that clinicians can refer patients to. |
| **Health Equity** | Health disparities exist when there is a major difference in a health outcome between population groups. Chronic disease plans should recognize the importance of addressing health equity and prioritize population groups more likely to experience poor health outcomes. |
| **Public Education and Communications** | Public education and communications can be used as strategic tools to influence people, places, and environmental conditions. Public education and communications can be prioritized to advance the goals and objectives of each chronic disease plan. |
| **Coordination** | A coordinated approach and common vision are essential to achieving the goals and objectives of this framework. Cross-coalition collaboration, greater information sharing, and the leveraging of resources will provide a more effective approach to implementing the policy, systems, and environmental change necessary to support healthy lifestyles and reduce premature death due to chronic disease. |
The HHSP also utilizes a framework of four sectors: Community Design and Access, Education, Health Care, and Worksite. This approach acknowledges the complexity of disease origins and promotes strategies that occur in multiple settings, e.g., where people live, learn, work, and play. Policy, systems, and environmental change in each of these settings will allow healthy options to become the easiest choice for Hawai’i residents.

**SECTOR AREAS**

**COMMUNITY DESIGN & ACCESS**
Public spaces (parks, community centers, and places of worship), physical infrastructure (sidewalks and bike lanes), and retail locations

**HEALTH CARE**
Public and private health care delivery sites

**EDUCATION**
Public and private childcare and aftercare facilities, pre-kindergarten through 12th grade schools, and higher education

**WORKSITE**
Public and private work environments

**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.
Additionally, the HHSP supports and reinforces the following comprehensive, chronic disease prevention and management strategic plans for the state:

- Hawai‘i Asthma Plan 2030
- Hawai‘i Cancer Plan 2030
- Hawai‘i Diabetes 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
Objectives and Strategies

The HHSP objectives strive to create sustainable change that will transform our communities, schools, health care, and worksites to support the health of the people of Hawai‘i. Stakeholders developed the HHSP 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 HHSP 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.

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

*Additional background information, including definitions of some terminology used in the objectives and strategies, can be found on the following website: www.HHSP.hawaii.gov*
Community Design and Access Sector Objectives

The Community Design and Access Sector includes places in the community where people live and play, such as public spaces (parks, community centers, and places of worship), physical infrastructure (sidewalks and bike lanes), and retail locations.

**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**

Develop and deliver at least one promotional activity to increase awareness of asthma education resources for non-clinical professionals.

**STRATEGIES**

- Identify stakeholders to establish a communications workgroup
- Convene communications workgroup regularly to develop messages tailored for targeted audience (e.g., coaches and/or caregivers)
- Identify media outlets that will reach targeted audience
- Disseminate messages through promotional activities (e.g., social media messages, posters, brochures, or other printed materials) and evaluate messages

**OBJECTIVE**

Establish and sustain a funded, statewide Asthma Control Program Coordinator position to address the burden of asthma in the State of Hawai'i.

**STRATEGIES**

- Provide written support and/or meet with the Director of Health to document the need of a State Asthma Control Program
- Provide written support/testimony to legislature to fund the Asthma Control Program Coordinator position
CANCER-01

OBJECTIVE
Develop at least one multi-island, small media campaign to promote Hepatitis B virus and Human Papillomavirus (HPV) vaccinations to prevent cancer.

STRATEGIES
- Identify stakeholders such as DOH Hepatitis Program and Hawai’i Comprehensive Cancer Coalition’s (HCCC) Vaccine-Preventable Cancer Workgroup to establish a communications workgroup to develop a small media campaign
- Identify and secure resources for the campaign
- Evaluate the effectiveness of the campaign

CANCER-02

OBJECTIVE
Develop at least one multi-island, small media campaign to increase awareness about each of the following topics: cancer as a chronic disease; the importance of family history for cancer; clinical trials; palliative care and hospice; prostate cancer; and cancer survivorship and issues faced by cancer survivors.

STRATEGIES
- Collaborate with cancer partners like the University of Hawai’i Cancer Center and Kokua Mau, the Hawai’i Genomics Program, and the HCCC Quality of Life Action Team to establish a communications workgroup to develop a small media campaign
- Identify and secure resources to develop the campaign
- Evaluate the effectiveness of the campaign

CANCER-03

OBJECTIVE
Develop at least one cancer survivorship and caregiver resource guide that will include follow-up care, lifestyle, psychosocial, and financial information.

STRATEGIES
- Establish a working group to develop the cancer survivorship resource guide in partnership with the HCCC Quality of Life Action Team
- Evaluate the validity and value of the cancer survivors and caregivers’ resource guide
- Identify and secure resources to develop and update the guide
OBJECTIVE

Increase by 20%, the proportion of adults who are diagnosed with cancer and participated in a cancer-related clinical trial.

STRATEGIES
- Address barriers to clinical trial participation and increase promotion of counter messages through outlets such as print, broadcast, and web-based media
- Integrate clinical trials into the training curriculum of academic institutions
- Identify and implement strategies to improve efficiency and resources related to clinical trials coordination for physicians
- Support access to clinical trials for neighbor island residents diagnosed with cancer

OBJECTIVE

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

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
### OBJECTIVE

**HEART DISEASE AND STROKE-01**

Develop and deliver at least two promotional activities to increase awareness of the preventability of heart disease and stroke.

**STRATEGIES**

- Identify stakeholders to establish a communications workgroup
- Convene communications workgroup regularly to develop messages tailored for targeted audience
- Identify media outlets that will reach targeted audience
- Disseminate messages through promotional activities (e.g., social media messages, posters, brochures, or other printed materials) and evaluate messages

### OBJECTIVE

**PHYSICAL ACTIVITY AND NUTRITION-01**

Increase by 50%, the number of food outlets that participate in a statewide healthy food incentive program(s).

**STRATEGIES**

- Secure long-term funding for Hawai’i’s Double Up Food Bucks program, which matches Supplemental Nutrition Assistance Program (SNAP) food stamp dollars spent on Hawai’i-grown produce
- Implement a statewide Produce Prescription Program, which enables participants to redeem “prescriptions” for produce at participating markets and grocery stores

### OBJECTIVE

**PHYSICAL ACTIVITY AND NUTRITION-02**

Enact at least two statewide policies to increase access to healthy food and/or decrease access to unhealthy food/beverages.

**STRATEGIES**

- Enact a fee on sugar-sweetened beverages, where revenue is allocated to obesity prevention initiatives
- Establish long-term, state funding for a Double Up Food Bucks SNAP incentive program

### OBJECTIVE

**PHYSICAL ACTIVITY AND NUTRITION-03**

Establish and sustain a funded Food Access Coordinator in each county to facilitate an active coalition.

**STRATEGIES**

- Food access coalitions will create and implement county-level action plans aimed at increasing access to, and consumption of, healthy food
- Secure county funding to support the activities of the coordinator and food access coalition
OBJECTIVE

Establish and sustain a funded, statewide Breastfeeding Coordinator to facilitate efforts supportive of breastfeeding exclusivity and duration.

STRATEGIES

• Assess statewide resources and capacity to fund and establish state-level breastfeeding coordinator position
• Develop scope and position description to include knowledge of indigenous cultures and breastfeeding support needs
• Identify gaps and strategically integrate the breastfeeding coordinator position in a way that bridges these gaps

OBJECTIVE

Develop guidelines to promote healthy food donations and purchase of healthy food to be adopted by 100% of Hawai’i food banks.

STRATEGIES

• Convene a working group with representation from Hawai’i’s foodbank network, to develop guidelines for healthy food donations

OBJECTIVE

Increase by 50 miles, the total miles of low-stress pedestrian infrastructure including, but not limited to, sidewalks and trails.

STRATEGIES

• Incorporate the specifications for “desirable” level of service described in the Hawai’i Department of Transportation’s Pedestrian Toolbox into the development of low-stress pedestrian infrastructure
• Increase Safe Routes to Schools and Safe Routes to Parks programs and projects
• Develop policies to encourage shade tree planting, to increase canopy cover, on high volume pedestrian corridors and trails
• Increase share of state and county transportation budgets dedicated to pedestrian infrastructure
• Implement Vision Zero and Complete Streets policies to increase safety and comfort of pedestrian experience
OBJECTIVE

Increase by 100 miles, the total miles of low-stress bicycle infrastructure including, but not limited to, protected bike lanes and off-street paths.

STRATEGIES

• Increase Safe Routes to Schools and Safe Routes to Parks projects
• Develop policies to encourage shade tree planting, to increase canopy cover, on high volume bicycle corridors and trails
• Increase share of state and county transportation budgets dedicated to bicycle facilities
• Implement Vision Zero and Complete Streets policies and projects to increase safety and comfort of bicyclist experience

BASELINE | TARGET
---|---
State | 0 | 1
County | 0 | 4

The state and each county will identify and adopt mode-share goals and measurements that prioritize walking and wheelchairs, bicycling, and transit use.

STRATEGIES

• Develop context-appropriate county-level Transportation Demand Management (TDM) Plans to establish mode baselines
• Develop more inclusive and comprehensive metrics for measuring active transportation beyond work and school commutes
• Support development of community Safe Routes to School (SRTS) plans, funding of SRTS infrastructure, free transit for minors, etc

OBJECTIVE

Increase by 10%, the proportion of existing urbanized land zoned to support walkable communities.

STRATEGIES

• Promote Equitable Transit Oriented Development (ETOD), town centers, mixed-use development, and upzoning for new development and zoning updates
• Adopt parking policy reforms to reduce parking oversupply, unbundle residential parking, reduce or eliminate parking minimums, and/or shift costs
• Change Level-of-Service to Vehicle Miles Traveled (VMT) in environmental review of new development
### TOBACCO-01

**Objective**

Enact at least five more county or state policies to decrease access to all tobacco products, including electronic smoking devices or other novel, emerging tobacco products.

**Strategies**

- Establish regulatory parity for cigarettes, electronic smoking devices (ESDs), and emerging products, etc (e.g. impose taxes, licensing/permitting/restricting online sales, etc)
- Prohibit the sale of all flavored tobacco products including menthol

### TOBACCO-02

**Objective**

Establish at least two more statewide policies that increase access to cessation services.

**Strategies**

- Establish a MedQUEST policy that requires health plans to offer expanded evidence-based cessation service options
- Establish a policy to formally coordinate services between the Hawai‘i Tobacco Quitline (HTQL), community cessation providers, and a private or public insurance provider to promote access to services to consumers
- Establish a policy that requires insurance companies to expand reimbursement for youth cessation

### TOBACCO-03

**Objective**

Establish at least two more county or state policies that eliminate exposure to secondhand smoke.

**Strategies**

- Enact a smoke-free multi-unit housing ordinance in all four major counties
- Establish policies that increase resources for smoke-free policy enforcement (at parks, beaches, public housing, etc)
Education Sector Objectives

The Education Sector includes places such as public and private childcare and aftercare facilities, pre-kindergarten through 12th grade schools, and higher education.

**GOAL** All of Hawai‘i’s educational settings will promote tobacco- and nicotine-free lifestyles, healthy eating, daily physical activity, and health management through programs, policies, environmental supports, and professional development opportunities.

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**OBJECTIVE**

Increase by 10%, the number of sites implementing CDC-recommended school- and/or community-based Asthma Self-Management Education programs.

**STRATEGIES**

- Expand the number of Asthma Self-Management Education (ASME) programs by facilitating partnerships with school- and community-based organizations
- Promote ASME programs with the new and existing partners

**BASELINE:** 7  **TARGET:** 8

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**OBJECTIVE**

Increase by 10%, the number of facilitators delivering CDC-recommended school- and/or community-based Asthma Self-Management Education.

**STRATEGIES**

- Expand the number of ASME programs by connecting potential volunteers
- Promote volunteer opportunities with new and existing partners

**BASELINE:** 13  **TARGET:** 14
EDUCATION SECTOR OBJECTIVES

CANCER-05

OBJECTIVE

Increase by five, the number of schools that implement 1 to 2 of the recommended CDC Sun Protection Guidelines.

STRATEGIES

• Conduct an assessment of the readiness of one or more schools to implement one or more of the recommended CDC Sun Protection Guidelines
• Partner with cancer partners such as the Hawai‘i Skin Cancer Coalition to promote the recommended CDC Sun Protection Guidelines

CANCER-06

OBJECTIVE

100% of eligible school-based clinics become Vaccines for Children providers.

STRATEGIES

• Conduct an assessment of eligible schools to determine their ability to become Vaccines for Children (VFC) providers
• Partner with the HCCC’s Vaccine Preventable Cancers Workgroup to promote the importance of making vaccines (e.g., HPV) available

HEART DISEASE AND STROKE-02

OBJECTIVE

Adopt a wellness policy designed to provide access to blood pressure cuffs and blood pressure education at public college campuses.

STRATEGIES

• Leverage partnerships within the University of Hawai‘i system to identify campus wellness/health services coordinator
• Explore potential partnerships and link available resources at American Heart Association

PHYSICAL ACTIVITY AND NUTRITION-10

OBJECTIVE

Adopt at least one policy to require annual courses in Health Education and Physical Education from grades K-8, in the Department of Education, that are aligned with national recommendations for instructional time and teacher licensing.

STRATEGIES

• Support a Board of Education policy change to require annual courses in Health Education in grades K-8 in Department of Education (DOE) public non-charter schools
• Support a Board of Education policy change to require annual courses in Physical Education in grades K-8 in DOE public non-charter schools
**OBJECTIVE**

50% of public non-charter schools participating in the Safety and Wellness Survey will meet at least 90% of the wellness guidelines.

**STRATEGIES**

- Create a toolkit to share with all participating public schools that highlights resources for the four lowest scoring wellness guidelines
- Collaborate with ECE stakeholders to create a physical activity and nutrition ECE setting focused training curricula developed from the Hawai‘i ECE Wellness Guidelines
- Partner with leaders in the early learning community to identify and implement incentives to support provider implementation of the ECE Wellness Guidelines

**BASELINE:** 0  **TARGET:** 1

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**OBJECTIVE**

Establish and sustain a funded statewide Food Systems Education Coordinator position to support ‘āina-based education, which promotes healthy eating in preschool through grade 12 (P-12) education settings.

**STRATEGIES**

- Assess statewide resources and capacity to fund and establish a statewide Food Systems Education Coordinator position
- Develop scope and position description to include knowledge of ‘āina-based education
- Identify gaps and strategically integrate the Food Systems Education Coordinator position in a way that bridges these gaps

**BASELINE:** 0  **TARGET:** 1
**TOBACCO-04**

**OBJECTIVE**

All colleges and universities in the State of Hawai‘i will provide tobacco-free education and offer cessation services to their students, staff and faculty.

**STRATEGIES**

- Provide tobacco prevention and cessation information at incoming student orientation sessions
- Support student health groups to conduct peer-led tobacco cessation and prevention promotion throughout all campuses
- Create linkages between community tobacco treatment specialists, the Hawai‘i Tobacco Quitline and universities to tailor promotions to students and increase access to cessation services for young adults

**BASELINE:** Pending  
**TARGET:** Pending  

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**TOBACCO-05**

**OBJECTIVE**

Develop and adopt at least one “alternative to suspension” model policy for youth vaping or tobacco offenses in Department of Education schools.

**STRATEGIES**

- Develop and adopt best practice enforcement responses/guidelines for youth vaping/tobacco offenses to guide law enforcement or Department of Education (DOE) school officials
- Pilot test a model alternative to suspension policy at a public or private school in Hawai‘i and use results to inform expansion into other schools

**BASELINE:** 0  
**TARGET:** 1  

---

**TOBACCO-06**

**OBJECTIVE**

All colleges and universities in the State of Hawai‘i will have a 100% smoke-free or tobacco-free campus policy.

**STRATEGIES**

- Conduct outreach to universities and colleges without tobacco-free policies to provide education and information about the benefits of implementing a tobacco-free campus
- Provide technical support to individual private colleges and universities to encourage adoption of tobacco-free campus policies

**BASELINE:** Pending  
**TARGET:** Pending  

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**TOBACCO-07**

**OBJECTIVE**

Conduct at least ten more educational campaigns for parents or youth influencers to provide information about tobacco/vaping prevention or cessation statewide.

**STRATEGIES**

- Develop culturally appropriate educational campaigns for use in school systems such as, the Hawaii Association of Independent Schools, Charter School Commission, and Hawaii State Department of Education
- Develop education campaigns that can be used in a variety of media types (radio, television, mall ads, social media, etc)
Health Care Sector Objectives

The Health Care Sector includes places such as public and private health care delivery sites.

**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.

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

**OBJECTIVE**

**BASELINE:** 0 **TARGET: 6**

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<th>MULTIPLE PROGRAM AREAS</th>
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<td>ASTHMA-06 • DIABETES-03 • HEART DISEASE AND STROKE-06</td>
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**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

### Meet 50% of identified Health Information Technology priority goals.

**OBJECTIVE**

**BASELINE:** 0 **TARGET:** 50%

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**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)
HEALTH CARE SECTOR OBJECTIVES

OBJECTIVE

**ASTHMA-05**

**OBJECTIVE**

Establish coverage of Asthma Self-Management Education programs by Medicaid.

**STRATEGIES**

- Identify existing literature/guidance/cost benefit analysis on ASME coverage
- Collaborate with Medicaid and provide guidance on ASME coverage and eligibility

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**OBJECTIVE**

**ASTHMA-08** • **DIABETES-05** • **HEART DISEASE AND STROKE-03**

**BASELINE: 0** **TARGET: 5**

**OBJECTIVE**

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

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**OBJECTIVE**

**BASELINE: Pending** **TARGET: Increase by 5%**

**MULTIPLE PROGRAM AREAS**

**ASTHMA-09** • **DIABETES-06** • **HEART DISEASE AND STROKE-04**

**OBJECTIVE**

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)

---

**OBJECTIVE**

**BASELINE: 1** **TARGET: 5**

**ASTHMA-09**

**OBJECTIVE**

Establish coverage of Asthma Self-Management Education programs by Medicaid.

**STRATEGIES**

- Identify existing literature/guidance/cost benefit analysis on ASME coverage
- Collaborate with Medicaid and provide guidance on ASME coverage and eligibility
OBJECTIVE

**CANCER-07**

Increase by ten, the number of health care systems that use Health Information Technology to address Hepatitis B vaccination.

**STRATEGIES**

- Identify key HIT stakeholders to establish a HIT workgroup
- Convene HIT workgroup regularly to identify the HIT priorities to enhance Hepatitis B vaccination rates
- Assess capacity of partner Federally Qualified Health Centers (FQHCs) to track and remind providers about Hepatitis B immunization rates
- Compile best practice models to increase immunization rates using HIT at FQHCs
- Identify and secure resources to implement HIT at partner FQHCs

OBJECTIVE

**CANCER-08**

Increase by ten, the number of new community pharmacies that implement activities to increase Hepatitis B vaccination.

**STRATEGIES**

- Identify pharmacies that serve communities at risk for Hepatitis B (e.g., Asian and Pacific Islander populations)
- Develop a workplan for increasing patient recruitment and reimbursement
- Identify and secure resources to implement the workplan

<table>
<thead>
<tr>
<th>BASELINE</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>LUNG: 8.5%</td>
<td>LUNG: 9.5%</td>
</tr>
<tr>
<td>BREAST: 87.0%</td>
<td>BREAST: 97.4%</td>
</tr>
<tr>
<td>CERVICAL: 82.7%</td>
<td>CERVICAL: 92.6%</td>
</tr>
<tr>
<td>COLORECTAL: 75.1%</td>
<td>COLORECTAL: 84.1%</td>
</tr>
</tbody>
</table>

OBJECTIVE

**CANCER-09**

Increase the proportion of adults receiving lung, breast, cervical, and colorectal cancer screenings.

**STRATEGIES**

- Partner with the Hawai‘i Primary Care Association to increase and implement evidence-based interventions (EBI) at FQHCs
- Identify resources and secure funding for implementation
- Evaluate the effectiveness of the implementation of the EBI
HEALTH CARE SECTOR OBJECTIVES

CANCER-11

OBJECTIVE

Increase the proportion of cancer survivors who have received treatment summaries and cancer survivorship care plans.

STRATEGIES

- Conduct an assessment of Commission on Cancer accredited cancer programs in the state on their methods of providing treatment summaries and cancer survivorship care plans
- Develop a plan in partnership with the HCCC Quality of Life Action Team members to educate cancer survivors on the benefits of treatment summaries and cancer survivorship care plans
- Develop a training for health care providers on ways to increase utilization of treatment summaries and cancer survivorship care plans

TARGET

TREATMENT SUMMARIES: 49.5%
CANCER SURVIVORSHIP CARE PLANS: 33.1%

BASELINE: 43.8%
CANCER SURVIVORSHIP CARE PLANS: 32.1%

HEART DISEASE AND STROKE-05

OBJECTIVE

Establish coverage for medication therapy management and/or self-measured blood pressure monitoring by Medicaid.

STRATEGIES

- Identify and review existing literature/guidance on Medication Therapy Management (MTM) and Self-Measured Blood Pressure Monitoring (SMBPM) reimbursement
- Collaborate with Medicaid and provide guidance on reimbursement for MTM and/or SMBPM
PHYSICAL ACTIVITY AND NUTRITION-14

**OBJECTIVE**

Increase by 5%, the number of people enrolled in nutrition and physical activity programs that are offered by health system payers.

**STRATEGIES**

- Expand coverage for Diabetes Prevention Programs (DPPs), or evidence-based DPP-like programs (e.g., Pili ‘Ohana Department of Native Hawaiian Health)
- Work with providers, health system payers, and worksites to increase awareness of and referrals to covered PAN programs
- Participate in Health Information Technology (HIT) workgroup to discuss potential referral options between health care organizations and self-management education programs related to physical activity and nutrition

PHYSICAL ACTIVITY AND NUTRITION-15

**OBJECTIVE**

Implement a Hawai‘i-specific hospital recognition program to incentivize promotion of exclusive breastfeeding through adoption of best practices that 100% of maternity care hospitals will participate in.

**STRATEGIES**

- Develop a statewide maternity care hospital recognition program, which sets policies and standards to support exclusive breastfeeding
- Convene a Hawai‘i hospital recognition program workgroup to create, administer, and evaluate the program

PHYSICAL ACTIVITY AND NUTRITION-16

**OBJECTIVE**

Establish comprehensive coverage for lactation consultation services and lactation supplies by all health insurance companies in the State of Hawai‘i.

**STRATEGIES**

- Engage lactation consultants and other breastfeeding stakeholders to:
  - Develop reimbursement models for Medicaid and commercial payers
  - Pilot coverage processes
HEALTH CARE SECTOR OBJECTIVES

TOBACCO-08

Implement at least five more health systems change policies or projects for tobacco cessation per the Clinical Practice Guidelines and Million Hearts Tobacco Cessation Change Package.

STRATEGIES

- Integrate assessment, referral, and treatment interventions for tobacco/nicotine use in routine care in health care systems using electronic health records
- Provide staff and clinician education about cessation services to increase referral to treatment after identifying patients with tobacco/nicotine addiction

<table>
<thead>
<tr>
<th>BASELINE</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional training programs</td>
<td>Pending</td>
</tr>
<tr>
<td>Health specialty organizations</td>
<td>Pending</td>
</tr>
</tbody>
</table>

TOBACCO-09

Integrate brief intervention education into at least five more health professional training programs as a graduation requirement, and into at least two health specialty organizations (e.g. American Academy of Pediatrics, American College of Surgeons, American Physical Therapy Association) as continuing education offerings.

STRATEGIES

- Identify relevant “health professional training programs”—such as pharmacy, nursing, medicine, dental hygiene, respiratory therapists, psychology, and other related allied health programs, where brief intervention education can be incorporated
- Coordinate brief intervention trainings with the behavioral health and substance use treatment communities
Worksite Sector Objectives

The Worksite Sector includes places such as public and private work environments.

**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**

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.

<table>
<thead>
<tr>
<th>BASELINE:</th>
<th>TARGET:</th>
</tr>
</thead>
<tbody>
<tr>
<td>very small = 0</td>
<td>very small = 10</td>
</tr>
<tr>
<td>medium = 0</td>
<td>medium = 10</td>
</tr>
<tr>
<td>small = 0</td>
<td>small = 15</td>
</tr>
<tr>
<td>large = 0</td>
<td>large = 5</td>
</tr>
</tbody>
</table>
**OBJECTIVE**

Establish at least one statewide policy designed to increase access to evidence-based chronic disease prevention and management programs that address asthma at worksites.

**STRATEGIES**
- In collaboration with Objective Asthma-11, identify stakeholders to establish an advisory group to develop a Hawai‘i-specific worksite wellness recognition program
- Convene workgroup regularly to draft a policy

**OBJECTIVE**

Increase by five, the number of employer groups that adopt a policy that allows time off for cancer screenings.

**STRATEGIES**
- Assess the employer groups ability to establish a policy that allows time off for cancer screenings
- Partner with selected employer groups to develop a policy
- Implement the policy and evaluate the effectiveness of the policy

**OBJECTIVE**

Establish at least one statewide policy designed to increase access to evidence-based chronic disease prevention and management programs that address heart disease and stroke at worksites.

**STRATEGIES**
- In collaboration with Objective Heart Disease and Stroke-09, identify stakeholders to establish an advisory group to develop a Hawai‘i-specific worksite wellness recognition program
- Convene workgroup regularly to draft a policy

**OBJECTIVE**

Establish at least two statewide policies designed to increase physical activity and/or healthy food options in government worksites.

**STRATEGIES**
- Establish a comprehensive worksite physical activity policy
- Establish a policy that requires nutrition standards for worksite vending machines and for meetings/events where food is served
**Objective**

Establish at least one statewide policy that supports breastfeeding exclusivity and duration.

**Strategies**

- Establish a statewide Paid Family Leave policy, which will support mothers’ ability to breastfeed by providing leave time for mothers to care for their newborns
- Encourage employers to adopt an Infant at Work policy, which allows employees the option of bringing their infants into the workplace and can support exclusive breastfeeding
- Encourage employers to adopt a Work from Home policy, which provides telecommuting options for breastfeeding mothers

---

**Objective**

At least five more large employers (including the State and Counties) will offer health plans that promote tobacco treatment coverage per U.S. Preventive Task Force recommendations.

**Strategies**

- Engage unions to make changes to provide cessation coverage with no co-pay in insurance plans
- Facilitate employers’ capacity to offer programs or insurance plans that incentivize cessation or offers cessation services with no co-pay

---

**Objective**

At least fifteen more worksites in the State of Hawai‘i will have 100% tobacco-free policies.

**Strategies**

- Develop and define criteria for 100% tobacco-free worksite campuses
- Develop tobacco-free campus policies for state and county departments
In Hawai‘i, chronic diseases are among the most prevalent, costly, and preventable of all health problems. The past two decades have seen unprecedented increases in chronic disease and obesity due to pronounced changes in the environment, behavior, and lifestyle. Sixty-four percent of adults are living with at least one chronic condition such as diabetes or heart disease. Chronic diseases account for the top three leading causes of death.

Obesity also continues to rise at an epidemic rate. In just two decades, the percentage of adults with obesity in Hawai‘i more than doubled from just over 10% in 1995 to 25% in 2018. Over half (59%) of adults exceed healthy Body Mass Index (BMI) standards and are either overweight or obese. Significant disparities in overweight and obesity rates are evident in many subpopulations, particularly across race and ethnicity. The current obesity epidemic is the culmination of drivers in the environment that discourage energy expenditure while encouraging overconsumption.

Obesity and chronic diseases are also prevalent in Hawai‘i’s youth. Obesity and overweight rates in younger populations have risen with nearly a third (28%) of high school youth exceeding healthy BMI standards. Evidence shows that chronic diseases, including those more often observed in adulthood, are on the rise in young people, with notable disparities. Youth in Hawai‘i also have some of the highest e-cigarette use rates in the nation. These findings highlight the pressing need for prevention policies and chronic disease management efforts that target youth.

Most chronic diseases can be prevented by eating well, being physically active, avoiding tobacco, and getting regular health screenings. Tobacco use is the single most preventable cause of death and disease, followed by physical inactivity and poor nutrition. These three risk factors are major contributors to the development of chronic diseases such as asthma, diabetes, many types of cancer, and heart disease and stroke.

The COVID-19 global pandemic highlights the necessity for a comprehensive approach that supports innovative changes in both the public health and health care delivery systems. Adopting such an approach would address the needs of all people, including priority populations, by promoting efficient coordination between public health and health care and adapting to rapidly changing circumstances that impact population health.

Partners across the state of Hawai‘i who developed the HHSP are committed to preventing chronic disease for all residents. Recent success in large-scale public health interventions is the result of going beyond programming to focus on policy, systems, and environmental change approaches. The HHSP is a strategic plan that focuses on creating higher order environmental, policy and systems changes that make healthy behaviors the “default” choice.

### Risk Factors for Chronic Diseases

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>16%</td>
</tr>
<tr>
<td>Cancer</td>
<td>9%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>12%</td>
</tr>
<tr>
<td>High Blood Cholesterol</td>
<td>32%</td>
</tr>
<tr>
<td>High Blood Pressure</td>
<td>34%</td>
</tr>
<tr>
<td>Obesity</td>
<td>25%</td>
</tr>
<tr>
<td>Adults Eating Less Than 5 Fruits and Vegetables a Day</td>
<td>80%</td>
</tr>
<tr>
<td>Adults Smoking Cigarettes</td>
<td>13%</td>
</tr>
<tr>
<td>Adults Not Meeting the Physical Activity Recommendations</td>
<td>75%</td>
</tr>
</tbody>
</table>

Hawai‘i Behavioral Risk Factor Surveillance System, 2017, 2018
Priority Populations

Hawai‘i is one of the most diverse states in the nation. The state’s main population groups are Native Hawaiians, Japanese, Chinese, Filipinos and Caucasians. Hawai‘i has a larger percentage of Native Hawaiians, Other Pacific Islanders, and multiracial subgroups than the rest of the country.

Non-Caucasian minorities, including large immigrant populations from Asian and Pacific Islander nations, comprise 74% of the population. Although Hawai‘i has consistently placed a high value on providing accessible, top quality health care for all, health disparities between population groups exist.

Numerous social, economic, and environmental factors influence the health of individuals and populations. For example, people with a quality education, stable employment, safe homes and neighborhoods, and access to high-quality, preventive health services tend to be healthier throughout their lives and live longer. Conversely, people with behavioral health disorders, those identifying as a sexual and gender minority including lesbian, gay, bisexual, transgender, queer and/or questioning (LGBTQ), or persons of low socioeconomic status, often face inequitable health outcomes. Where you live directly affects your health in a number of ways, from the accessibility of healthy food, to the availability of green space to be physically active, to access to primary health care. In Hawai‘i, life expectancy ranges by zip code from 73 years to 87 years, a 14 year difference. Inequity is also found across ethnic and non-English speaking communities. The COVID-19 pandemic and climate change are bearing out the disparate vulnerabilities across communities in Hawai‘i. The HHSP recognizes and prioritizes the importance of addressing health equity and priority population groups that are more likely to experience poor health outcomes.

People with access to quality education, stable employment, safe homes and neighborhoods, and preventive health services live healthier, longer lives.
Achieving Health Equity
Research suggests social determinants of health may be the most important factors in health outcomes and health equity.

To ensure that individuals and communities across the state achieve their full health potential, the HHSP addresses social determinants of health domains such as education; health care and quality; and neighborhood and built environments.

The plan also provides insights on population characteristics, disease data and trends, and existing health inequities. Communities that are most vulnerable or more likely to experience disparities have been identified and prioritized.

Social Determinants of Health

Social determinants of health are 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.

Advancing Health Equity

A “one size fits all” approach to expanding opportunities for improved health is like expecting everyone to be able to ride the same bike. Aiming for “Equity,” rather than “Equality,” provides a more tailored approach to addressing the unique needs of our most vulnerable populations.
ASTHMA

Asthma is a chronic condition that intermittently inflames and narrows the airways in the lungs.

Asthma affects people of all ages and often starts during childhood. Since 1980, asthma prevalence has steadily climbed, making asthma the most common, chronic childhood disease both in the U.S. and Hawai‘i. 13,14 Approximately 104,400 (9%) adults and 30,000 (10%) children in Hawai‘i currently have asthma.15 Among youth, more boys than girls have asthma, but this trend reverses in adulthood, when adult women are twice as likely as their male counterparts to report current asthma.

Over the past decade, Hawai‘i has successfully implemented initiatives that have set the stage for improvements in asthma control and prevention. For example, since 2014 there has been a steady increase throughout the state in the number of school-based health centers and Hawai‘i Keiki Program nurses. Both of these programs provide support and services to students who need assistance with chronic conditions such as asthma. And in 2019, Hawai‘i passed legislation authorizing a community paramedicine program that allows paramedics to provide treatment and disease management assistance in the homes of patients. This type of program will help reduce emergency room and urgent care visits related to poorly controlled asthma or asthma attacks.

Symptoms of an asthma attack include shortness of breath, wheezing, and chest tightness. Asthma attacks can be triggered by allergens (such as dust mites, pet dander, and mold), irritants (such as secondhand smoke and vog), and respiratory infections (such as the flu).

In the primary care setting, asthma can be diagnosed using spirometry (a common test for measuring lung function) and managed with medication, usually daily inhaled corticosteroids, and tools such as Asthma Action Plans.16 However, when asthma is not effectively managed, patients often need to seek treatment in emergency departments: severe cases can result in hospitalization or even death. In 2016, $12 million was spent in Hawai‘i on emergency department visits for adults and children with asthma.17 The average cost per patient for asthma hospitalizations was $18,000.17

Despite ongoing and targeted public health efforts to reduce the burden of asthma in Hawai‘i, asthma-related health disparities persist. According to an analysis of 2018 BRFSS data, 15% of Native Hawaiian adults reported having current asthma, compared to the state average of 9%.15 People with lower socioeconomic status and those who live in rural regions of Hawai‘i are also significantly more likely to have asthma and to have their condition under poor control.15,19 In 2018, half of adults with current asthma lived in households with an annual income of less than $15,000.15 The regions with the highest prevalence in the state in 2018 were Hilo on Hawai‘i Island (24%) and the Waianae-Nanakuli area of Oahu (23%), both higher than the state asthma prevalence average (16%).15
Asthma Program Area Successes

Policy allowing students to self-administer medication at school established 2004

School Health Aide curriculum developed by Kapiolani Community College 2014

Smoke-free vehicle laws to protect youth from secondhand smoke passed in all four counties 2010–2018

Insurance billing for community paramedicine and non-hospital emergency department transports authorized 2019

1 in 11 adults in Hawai’i currently have asthma

1 in 10 children in Hawai’i currently have asthma

12% 9% 8% 11%

In Hawai’i, asthma is more prevalent among boys than girls and adult women compared to men

$12M SPENT ON EMERGENCY DEPARTMENT VISITS FOR ASTHMA (2016)

AVERAGE COST PER PATIENT FOR ASTHMA HOSPITALIZATIONS (2016)

$18,000

ASTHMA PRIORITY POPULATIONS

» Native Hawaiians
» Youth
CANCER

Cancer is the second leading cause of death in Hawai‘i, and more than 2,300 die annually from the disease.³

From 2012-2016, the average annual mortality rate for all cancers combined was 158 per 100,000 males and 110 per 100,000 females.²⁰ Lung cancer is the leading cause of death among both men and women.²⁰

In 2016, there were over 62,200 Hawai‘i residents living with cancer.²⁰ The annual incidence rate from 2012-2016 for all cancers combined was 426 per 100,000 in males and 400 per 100,000 in females.²⁰ Breast cancer is the most common cancer among women, and prostate cancer is the most common cancer among men.²⁰

Despite the ongoing burden of cancer in the state, Hawai‘i has successfully implemented programs to alleviate cancer’s impact. For example, an Adolescent Vaccination Peer-Education Project was implemented on Oahu and included a curriculum to raise awareness about adolescent vaccine-preventable diseases; the State’s Administrative Rules were changed to require Human Papillomavirus (HPV) vaccinations for all students entering 7th grade; and an evidence-based program on cancer survivorship, Cancer: Thriving and Surviving, was developed and offered on the island of Maui.

The risk factors that contribute to cancer affect certain population groups more than others. These factors include poverty, poor nutrition, lower education levels, limited access to health care, language barriers, toxic environmental exposures, risky health behaviors, geographic isolation, and genetics.²¹ In Hawai‘i, subgroups disproportionately affected by cancer include Native Hawaiians, Filipinos, Samoans, Other Pacific Islanders, and people with lower income or lower educational attainment.²² These subgroups are more likely to lack insurance, encounter long distances to health services, or experience culturally inappropriate health care.²² The HHSP and the Hawai‘i State Cancer Plan 2030 prioritizes engagement with the most at-risk populations to identify culturally appropriate strategies that will address health inequities and reduce cancer risks.

Hawai‘i has successfully implemented programs to improve the quality of life for cancer survivors.
Cancer Program Area Successes

Breast and Cervical Cancer Treatment Program established 2001

Mandated health care coverage for colorectal cancer screening 2010

Cancer: Thriving and Surviving Program adopted as part of survivorship care on Maui 2017

Human papillomavirus (HPV) vaccine curriculum developed for Oahu school 2018

Hepatitis B vaccination program developed in community pharmacies 2019

HPV vaccine required for all students entering 7th grade 2020

CANCER IS THE SECOND LEADING CAUSE OF DEATH (AFTER HEART DISEASE) IN HAWAI’I

There are over 62,000 adult Cancer Survivors in Hawai’i

CANCER PRIORITY POPULATIONS

» Native Hawaiians
» Filipinos
» Other Pacific Islanders

Site Specific Cancer Screening Rates

Hawai’i Behavioral Risk Factor Surveillance System, 2018
DIABETES

In the 2018 Hawai‘i Behavioral Risk Factor Surveillance System (BRFSS), 14% of adults in the state reported that they were diagnosed with prediabetes and 12% reported that they were diagnosed with diabetes.\(^{23}\)

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.\(^{24}\)

There have been great strides to increase awareness of prediabetes and diabetes in Hawai‘i through promotion of the National Diabetes Prevention Program (DPP) and Diabetes Self-Management Education and Support services (DSMES). The Diabetes Prevention and Control Program (DPCP) has increased screening, testing, and referral of people with prediabetes, increased access to lifestyle change programs, and increased coverage of DPP. The availability of DPPs has increased from 0 to 17 programs since 2016, with DPP now available in all four counties. Additionally, the DPP has become a benefit covered by Medicare, and several health plans and employers in Hawai‘i now offer a DPP benefit.

Significant challenges in diabetes disease management still remain statewide. Health Resources and Services Administration (HRSA) data indicate that almost 35% of Federally Qualified Health Centers’ (FQHC) diabetic patients have uncontrolled diabetes.\(^{25}\) Similarly, 2016 Physician Quality Reporting System data show that 30% of diabetic patients show poorly managed A1c levels. The high rates of prediabetes, diabetes, and poorly managed conditions contributes significantly to the state’s health care expenditures. In 2012, Hawai‘i spent an estimated $1.1 billion in total direct medical expenses for undiagnosed and diagnosed diabetes, prediabetes and gestational diabetes.\(^{26}\) An additional $419 million was spent on indirect costs related to lost productivity due to diabetes.\(^{27}\)

Diabetes affects certain race and ethnic groups in Hawai‘i more than others. Filipino, Native Hawaiian, and Other Pacific Islander populations have a prevalence of diabetes two to three times higher than Caucasians.\(^{28}\) Many risk factors (e.g., family history of diabetes, age 45 and older, ethnicity) contribute to the disproportionate burden of diabetes on certain subgroups.\(^{29}\) The HHSP provides a framework for addressing diabetes disparities and enhancing diabetes screening and awareness through policy, systems, and environmental change strategies.
Number of Diabetes Prevention Program (DPP) sites increased from 0 to 17 2016–2020

DPP covered by Medicare 2018

Hawai‘i Department of Health offers HI DPP, an online DPP platform, to recognized DPP providers across the state 2020

80% of people with prediabetes do not know that they have it

1 out of 5 people do not know that they have diabetes

$1 BILLION spent on direct healthcare costs for diabetes in Hawai‘i (2012)
HEART DISEASE AND STROKE

Cardiovascular disease is the leading cause of death nationally and in Hawai‘i.

More than 859,000 adults in the U.S. and 4,000 in Hawai‘i die annually from heart disease, stroke, or other cardiovascular diseases.30, 31 The burden of cardiovascular disease continues to grow as the associated risk factors for the disease also increase, such as obesity and type 2 diabetes. The American Heart Association (AHA) predicts that by 2035, nearly half of the U.S. population (131.2 million people) will have at least one cardiovascular condition*.32 Self-reported BRFSS data for Hawai‘i reports that approximately 3% of adults have coronary heart disease; 3% have had a stroke; 32% have high blood cholesterol; and 34% have high blood pressure.33 Of those with high blood pressure, 25% have not taken any medications to control their condition.34 Among the Medicare population, 56% have high blood pressure, and 46% have high blood cholesterol.35, 36

Cardiovascular disease places an enormous burden on Hawai‘i’s health and the economy. There are over 18,000 hospitalizations annually due to cardiovascular disease, which accounts for 22% of the state’s hospital costs.37 These costs include money spent on services provided within the health care system, prescription drugs, home health, and other related services.37 Additionally, cardiovascular conditions remain a major risk factor for serious illness and death related to COVID-19.38

Recent changes to national standards for diagnosing and classifying high blood pressure are likely to assist in Hawai‘i’s fight against cardiovascular disease. The definition of high blood pressure was changed from 140/90 mm Hg to 130/80 mm Hg, which will help maximize the benefits of early diagnosis, risk reduction, drug therapy, and lifestyle change. Hawai‘i has also successfully implemented a community paramedicine program that allows paramedics to assist with public health, primary care, and prevention services, including home visits to help patients manage high blood pressure. These successes, along with other policy, systems and environmental change strategies highlighted in the HHSP, are expected to positively impact the overall cardiovascular health of the state.

The strategies and goals of the HHSP include a focus on addressing the disproportionate rates of heart disease among Hawai‘i’s most at-risk groups: Native Hawaiians, Filipinos, and Other Pacific Islanders. These subgroups have higher rates of coronary heart disease, angina, history of a heart attack, and heart attack deaths than the national rate of Caucasian persons. According to 2018 BRFSS data, Filipinos in Hawai‘i have significantly higher rates of high blood pressure, and Japanese have significantly higher rates of both high blood pressure and high blood cholesterol.4

*Cardiovascular conditions include high blood pressure, coronary heart disease, stroke, congestive heart failure, and atrial fibrillation.
Heart Disease and Stroke Program Area Successes

“Million Hearts” national initiative established 2012

National hypertension guidelines updated 2017

Self-measured blood pressure management guidance issued by American Heart Association 2019

Hawaii’s High Blood Pressure &
High Blood Cholesterol Prevalence

Percentage

High Blood Pressure
34%
56%
34%
32%

High Blood Cholesterol

Adults
Medicare Population

Heart Disease and Stroke Risk Factors

Poor Diet
Family History
Physical Inactivity
Diabetes
Stress
High Blood Pressure
HDL
LDL
High Cholesterol

Over 1/3 of Federally Qualified Health Center patients with high blood pressure do not have their condition under control

Health Resources and Services Administration, Uniform Data System, 2019

U.S. Cardiovascular Disease Costs

$555 Billion
$1.1 Trillion
2016
2030

American Heart Association
Cardiovascular Disease: A Costly Burden for America – Projections Through 2035, 2017

HEART DISEASE AND STROKE PRIORITY POPULATIONS

» Native Hawaiians
» Filipinos
» Other Pacific Islanders
» Medicaid Beneficiaries
PHYSICAL ACTIVITY AND NUTRITION

Physical inactivity and poor nutrition are the most common behavioral risk factors associated with obesity and other chronic diseases.

Individuals who are at a healthy weight are less likely to develop chronic diseases, experience complications during pregnancy, or die at an earlier age.\(^{39,40,41}\)

**Overweight and Obesity**

During the past 20 years, there has been a dramatic increase in obesity in the U.S., and rates remain high. In Hawai’i, nearly 60% of adults are overweight or obese, with the highest rates occurring among Native Hawaiians (75%) and Other Pacific Islanders (73%).\(^{42}\) Chinese and Other Asian residents have the lowest overweight and obesity rates, followed by Japanese and Caucasians.\(^{42}\) Among Hawai’i’s teenagers, obesity and overweight rates are lower (28%) than adults.\(^{43}\) However, there are large disparities in teen obesity rates across race and ethnicity: almost two-thirds (65%) of Other Pacific Islander teenagers are overweight or obese.\(^{43}\) The high prevalence of these conditions has a significant impact on the state’s economy, as Hawai’i spends an estimated $470 million on obesity-related medical costs annually.\(^{44}\) Although high rates of overweight and obesity have persisted, they are largely preventable with lifestyle modifications such as exercise and good nutrition.\(^{45}\)

To facilitate the integration of physical activity and healthy eating into the daily lives of all residents, the HHSP and the Hawai’i Physical Activity and Nutrition Plan 2030 have prioritized policy, systems, and environmental change strategies. In the past, this approach has resulted in the successful implementation of statewide initiatives such as Choose Healthy Now, a partnership between the State and retailers that provides residents opportunities to eat well by highlighting healthier food and beverage options at the point of sale. Other successful, statewide policies and programs have focused on youth, such as the Early Childhood Care and Education (ECE) Wellness Guidelines, which incorporate physical activity into daily routines and learning experiences; and the Healthy Beverage Default Policy (HRS § 321-30.3), which requires food establishments that serve kid’s meals to have a healthy option as the default beverage.
Physical Activity and Nutrition Program Area Successes

Hawai‘i State Department of Education Wellness Guidelines Fully Adopted 2011

Choose Healthy Now Expands Statewide 2018

Early Childhood Care & Education Wellness Guidelines Established 2018

Vision Zero Policy Passed 2019

Healthy Default Beverage Policy Passed 2019

28% OF HIGH SCHOOL AGED-YOUTH ARE OVERWEIGHT OR OBESE

60% OF ADULTS ARE OVERWEIGHT OR OBESE

$470 million state medical cost attributable to obesity

Overweight or Obese by Priority Populations*

<table>
<thead>
<tr>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarteners</td>
<td>29%</td>
</tr>
<tr>
<td>High Schoolers</td>
<td>28%</td>
</tr>
<tr>
<td>Kūpuna</td>
<td>53%</td>
</tr>
<tr>
<td>Low-Income</td>
<td>62%</td>
</tr>
</tbody>
</table>

Hawai‘i Health Data Warehouse, Behavioral Risk Factor Surveillance System, 2018
Hawai‘i Health Data Warehouse, National Immunization Survey, 2017
Physical Activity
Regular physical activity is vital for health and well-being. Adults who are physically active can lower their risk of premature death, chronic disease, some forms of cancers, and falls and their associated injuries. For children and adolescents, physical activity can improve bone health, cardio-respiratory fitness and muscle strength, reduce body fat, and help manage symptoms of depression.46

In Hawai‘i, most adults and youth fail to meet the federal guidelines for physical activity. Only 25% of adults, 15% of high schoolers, and 20% of middle school students report meeting the recommended amount of physical activity.47 Data also indicate that physical activity levels vary by age and race and ethnicity. Only 18% of adults 75+ years old meet recommendations, compared to 32% of young adults (18-24 years old).47 Similarly, only 17% of Chinese adults are getting enough physical activity, compared to 31% of Caucasians.47

Nutrition
Good nutrition is important for everyone and forming healthy eating habits helps prevent chronic diseases like obesity, type 2 diabetes, and high blood pressure. Most Americans, however, tend to have diets high in sugar, saturated fats, and sodium, and do not consume the recommended amounts of fruits and vegetables. Across Hawai‘i, both youth and adults show low rates of fruit and vegetable consumption. Among high schoolers, only 14% eat the recommended amounts of fruits and vegetables, with Japanese youth having the lowest rate (8%).53 Additionally, only 1 in 5 adults eat enough fruit and vegetables, with only 13% of Japanese adults eating the recommended five servings a day.47

Adults who are physically active can lower their risk of premature death, chronic disease, and some forms of cancer.

Forming healthy eating habits helps prevent chronic disease.

Physical Activity Barriers
- Limited access to public spaces and public transportation
- Lack of safe routes to walk, bike, or wheel

Healthy Eating Barriers
- Limited access to affordable, nutritious, culturally familiar food
- Lack of cooking skills and nutrition education
- Excess availability and marketing of unhealthy food

48
1 out of 4 adults meet physical activity recommendations

14% of high school aged-youth eat the recommended amount of fruits and vegetables

20% of adults eat the recommended amount of fruits and vegetables

57% of infants exclusively breastfed at 3 months

Fewer than 1 in 5 middle and high school students meet physical activity recommendations
TOBACCO PREVENTION AND CONTROL

Tobacco use is the leading cause of preventable death and disease in the U.S. and remains a public health priority.

Approximately 14% of U.S. adults and 6% of youth currently smoke cigarettes. Cigarette smoking leads to disease and disability, and harms nearly every organ of the body as it causes cancer, heart disease, stroke, lung diseases, type 2 diabetes, and chronic health conditions. In Hawai‘i, about 13% of adults and 5% of youth currently smoke cigarettes. Smoking claims 1,400 adult lives each year and will contribute to 21,000 premature deaths for children and youth under 18 years old living in Hawai‘i. Annually, $526 million in health care costs are directly attributed to smoking in the state.

Hawai‘i has made great strides in tobacco control efforts, which has resulted in lower tobacco use rates (20% adult smokers in 1998 vs. 13% in 2018). In 2006, Hawai‘i was the fourteenth state to pass comprehensive smoke-free legislation, and in 2014 smoking became illegal on all state-owned, public housing properties. Over the last five years, Hawai‘i became the first state to raise the legal age of sales for tobacco from 18 to 21; electronic cigarettes (e-cigarettes) were banned wherever smoking is prohibited; and all four major counties implemented ordinances that prohibited smoking and vaping in a vehicle whenever a minor is present.

Despite past successes and an overall decrease in tobacco use, there are subgroups and communities in the state that show persistently higher smoking rates. For example, the prevalence of smoking in the Native Hawaiian population is 22%, and persons with a diagnosed depressive disorder are at 26%. Approximately one in three individuals who report heavy drinking also smoke cigarettes, and almost 22% of the LGBT community smokes. The smoking rates vary across socioeconomic factors as well. Twenty-two percent of adults with lower incomes (<$25,000) smoke, as well as 32% of adults who are unemployed, and 26% of adults with less than a high school education.

More recently, the explosion of new and novel tobacco products, such as e-cigarettes, has overwhelmed the community. Hawaii youth in 2019 had among the highest e-cigarette use rates in the nation, with 31% of high school and 18% of middle school students reporting regular use. During 2019, high school use in rural, neighbor island counties fared even worse, with Kauai at 36%, Maui at 36%, and Hawaii County at 35%. Moving forward, regulation of e-cigarettes, expansion of smoke-free policies, increases in tobacco prices, and additional youth access policies are needed, along with culturally tailored cessation services to reach our most vulnerable communities.
Youth rise in e-cigarette use in recent years compared with cigarette smoking in Hawai‘i (YRBS)

E-cigarettes are prohibited wherever smoking is not allowed 2015

Smoking and vaping are prohibited in vehicles with minors present 2017–2018

Tobacco Program Area Successes

Hawai‘i is the first state in the nation to raise the legal age of tobacco sales to 21 2015

E-cigarettes are prohibited wherever smoking is not allowed 2015

Smoking and vaping are prohibited in vehicles with minors present 2017–2018

Proven population-based measures to reduce tobacco use

- Tobacco price increases
- Hard hitting media campaigns
- Smoke-free policies
- Cessation access

Annual healthcare costs in Hawai‘i

$526 million healthcare costs directly attributed to smoking

$142 million Medicaid costs related to smoking

$835 per household
Residents’ state and federal tax burden from smoking-caused government expenditures

$387 million
Smoking-caused productivity losses in Hawai‘i

UNIFIED PLANNING APPROACH

Prior to the HHSP, individual state plans outlined objectives and strategies for each risk factor and chronic disease. Recognizing the opportunity to improve collaboration and better leverage resources and efforts, leaders and stakeholders decided that a single, coordinated plan to prevent and reduce chronic disease would be developed and encompass the following program areas:

- Asthma
- Cancer
- Diabetes
- Heart Disease and Stroke
- Physical Activity and Nutrition
- Tobacco

Moving to a harmonized planning approach enables coordination of multiple programs across common risk factors, interventions, and strategies. It also facilitates the expansion of evidence-based policies, programs, and services, and keeps Hawai‘i in step with national funding requirements, recommended strategies, and best practices that combine multiple health areas and address the spectrum of chronic disease.

HHSP ADVISORY GROUP MEETINGS

The development of the HHSP began in May 2019 with the initial meeting of the HHSP Advisory Group. The Advisory Group consisted of diverse stakeholders who set the framework for the development of the strategic plan. The approach to developing the coordinated HHSP centered on four sector areas: Community Design and Access, Education, Health Care and Worksite. Utilizing these settings focuses disease prevention, detection, and management efforts on areas where people spend most of their time. The Advisory Group convened periodically during the strategic planning process to ensure that progress aligned with the overall purpose and vision of the plan.

STAKEHOLDER KICK-OFF MEETING

A stakeholder kick-off meeting was held in July 2019. Participants from the various program areas were provided an overview of the previous individual state plans, past accomplishments, and current challenges. The group was then tasked with envisioning the policy, systems, and environmental change needed in each sector that would serve as the foundation of the HHSP.

PROGRAM AREA STAKEHOLDER MEETINGS

Equipped with the vision of a healthier Hawai‘i, stakeholders and content experts then met within their program areas to generate objectives and strategies for the HHSP. Program area discussions centered on population-based strategies and programs that would develop local capacity and empower infrastructures to combat health disparities.

This collaborative process brought together representation from health care systems; academic institutions; private and non-profit groups; professional and community organizations; state and county government agencies; and resulted in the comprehensive, population-based approach of the HHSP.

Moving to a harmonized planning approach enables coordination of multiple programs across common risk factors, interventions, and strategies.
IMPLEMENTATION

CONTINUED COORDINATION AND ACTIVE STAKEHOLDER ENGAGEMENT ARE NEEDED TO ACHIEVE THE HHSP OBJECTIVES BY 2030.

Program area stakeholder groups continue to meet regularly to implement the plan’s objectives and strategies, and to monitor and evaluate progress. The HHSP is meant to be a dynamic document that is assessed and updated throughout the plan’s timeframe. Stakeholder group membership is expected to change to assure an inclusive, community-based participatory approach to realize the plan’s goals. The plan is meant for public dissemination and will be available online at www.HHSP.hawaii.gov.

LONG-TERM MEASURES

The long-term measures were identified to summarize and evaluate progress toward achieving the HHSP objectives. The long-term measures will be monitored throughout the decade to collectively illustrate the overall health and well-being of the people of Hawai‘i and demonstrate improvements. Long-term measures will be reviewed and updated periodically as changes are made to the HHSP.

<table>
<thead>
<tr>
<th>PROGRAM AREA</th>
<th>LONG-TERM MEASURE</th>
<th>BASELINE</th>
<th>TARGET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>Hospitalizations for Asthma</td>
<td>Children under 5 years of age: 17.5 per 100,000 (HHIC, 2015) Persons between 5-64 years of age: 5.2 per 100,000 (HHIC, 2015) Adults 65 years of age and older: 15.5 per 100,000 (HHIC, 2015)</td>
<td>Children under 5 years of age: 14.9 per 100,000 Persons between 5-64 years of age: 4.4 per 100,000 Adults 65 years of age and older: 13.2 per 100,000</td>
</tr>
<tr>
<td>Asthma</td>
<td>ED Visits for Asthma</td>
<td>Children under 5 years of age: 98.9 per 10,000 (HHIC, 2015) Persons between 5-64 years of age: 51.9 per 10,000 (HHIC, 2015) Adults 65 years of age and older: 30.9 per 10,000 (HHIC, 2015)</td>
<td>Children under 5 years of age: 86.1 per 10,000 Persons between 5-64 years of age: 44.1 per 10,000 Adults 65 years of age and older: 26.3 per 10,000</td>
</tr>
<tr>
<td>Asthma</td>
<td>Use of Appropriate Medications for Asthma</td>
<td>82.5% (UDS, 2019)</td>
<td>91.6%</td>
</tr>
<tr>
<td>Cancer</td>
<td>Cancer death rate</td>
<td>128.5 per 100,000 (CDC National Center for Health Statistics National Vital Statistics System, 2017)</td>
<td>122.7 per 100,000</td>
</tr>
<tr>
<td>Cancer</td>
<td>Lung cancer death rate</td>
<td>28.4 per 100,000 (CDC National Center for Health Statistics National Vital Statistics System, 2017)</td>
<td>25.1 per 100,000</td>
</tr>
<tr>
<td>Cancer</td>
<td>Breast cancer death rate</td>
<td>15.6 per 100,000 (CDC National Center for Health Statistics National Vital Statistics System, 2017)</td>
<td>15.3 per 100,000</td>
</tr>
<tr>
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</tr>
<tr>
<td>Cancer</td>
<td>Colon cancer death rate</td>
<td>11.7 per 100,000 (CDC National Center for Health Statistics National Vital Statistics System, 2017)</td>
<td>8.9 per 100,000</td>
</tr>
<tr>
<td>Cancer</td>
<td>Prostate cancer death rate</td>
<td>14.5 per 100,000 (CDC National Center for Health Statistics National Vital Statistics System, 2017)</td>
<td>12.6 per 100,000</td>
</tr>
<tr>
<td>Cancer</td>
<td>Mammogram in the past 2 years (ages 50-74)</td>
<td>87.0% (BRFSS, 2018)</td>
<td>97.4%</td>
</tr>
<tr>
<td>Cancer</td>
<td>Pap test in the past 3 years (ages 21-65)</td>
<td>82.7% (BRFSS, 2018)</td>
<td>92.6%</td>
</tr>
<tr>
<td>Cancer</td>
<td>Colorectal cancer screening (ages 50-75)</td>
<td>75.1% (BRFSS, 2018)</td>
<td>84.1%</td>
</tr>
<tr>
<td>Cancer</td>
<td>Five-year cancer survivorship</td>
<td>66.7% (BRFSS, 2012)</td>
<td>78.7%</td>
</tr>
<tr>
<td>Cancer</td>
<td>Sunscreen use (ages 11-18)</td>
<td>Middle school students: 11.5% (YRBS, 2017) High school students: 11.7% (YRBS, 2017)</td>
<td>Middle school students: 13.0% High school students: 13.2%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diabetes death rate - multiple cause of death</td>
<td>60.1 per 100,000 (DOH Vital Statistics, 2018)</td>
<td>52.9 per 100,000</td>
</tr>
<tr>
<td>Diabetes</td>
<td>New cases of diabetes</td>
<td>7.6 per 1,000 (CDC Diabetes Atlas, 2015)</td>
<td>5.6 per 1,000</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diabetes test in the past 3 years (ages 40-70, BMI over 25)</td>
<td>65.3% (BRFSS, 2018)</td>
<td>73.1%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>People with diagnosed diabetes who received formal diabetes education</td>
<td>56.0% (BRFSS, 2016)</td>
<td>63.8%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>People with diabetes with an A1c greater than 9</td>
<td>34.9% (UDS, 2019)</td>
<td>31.1%</td>
</tr>
<tr>
<td>Heart Disease and Stroke</td>
<td>Coronary heart disease death rate</td>
<td>66.0 per 100,000 (CDC Interactive Atlas of Heart Disease and Stroke, 2016-2018)</td>
<td>58.1 per 100,000</td>
</tr>
<tr>
<td>Heart Disease and Stroke</td>
<td>Stroke death rate</td>
<td>36.0 per 100,000 (CDC Interactive Atlas of Heart Disease and Stroke, 2016-2018)</td>
<td>33.4 per 100,000</td>
</tr>
<tr>
<td>PROGRAM AREA</td>
<td>LONG-TERM MEASURE</td>
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</tr>
<tr>
<td>Heart Disease and Stroke</td>
<td>Adults (with high blood pressure) who report taking medications for high blood pressure</td>
<td>75.0% (BRFSS, 2017)</td>
<td>84.8%</td>
</tr>
<tr>
<td>Heart Disease and Stroke</td>
<td>Adults with hypertension with controlled blood pressure</td>
<td>63.1% (UDS, 2019)</td>
<td>70%</td>
</tr>
<tr>
<td>Heart Disease and Stroke</td>
<td>Adults at risk for cardiovascular events prescribed statin therapy (age 21 years and older)</td>
<td>68.7% (UDS, 2019)</td>
<td>76.3%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Adults who eat five or more servings of fruits and vegetables per day</td>
<td>19.8% (BRFSS, 2015)</td>
<td>22.8%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Teens (high school) who eat five or more servings of fruits and vegetables per day</td>
<td>14.2% (YRBS, 2017)</td>
<td>16.0%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Adults who have a healthy body weight (BMI 18.5 - 25.0)</td>
<td>37.9% (BRFSS, 2018)</td>
<td>42.4%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Teens (high school) who have a healthy body weight (BMI 18.5 - 25.0)</td>
<td>71.6% (YRBS, 2017)</td>
<td>80.9%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Adults who meet aerobic PA guidelines (150 minutes per week)</td>
<td>56.5% (BRFSS, 2017)</td>
<td>63.8%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Adults who meet muscle strengthening PA guidelines (2 or more days per week)</td>
<td>35.4% (BRFSS, 2017)</td>
<td>40.0%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Teens (high school) who meet aerobic PA guidelines (60 minutes per day)</td>
<td>19.6% (YRBS, 2017)</td>
<td>30.6%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Teens (high school) who meet muscle strengthening PA guidelines (3 or more days per week)</td>
<td>42.4% (YRBS, 2017)</td>
<td>56.1%</td>
</tr>
<tr>
<td>PROGRAM AREA</td>
<td>LONG-TERM MEASURE</td>
<td>BASELINE</td>
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</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Young teens (middle school) who meet aerobic PA guidelines (60 minutes per day)</td>
<td>27.0% (YRBS, 2017)</td>
<td>30.5%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Young teens (middle school) who meet muscle strengthening PA guidelines (3 or more days per week)</td>
<td>50.6% (YRBS, 2017)</td>
<td>57.2%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Adults who self-reported their health status as ‘Good’, ‘Very Good’, or ‘Excellent.’</td>
<td>83.7% (BRFSS, 2018)</td>
<td>93.7%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Adults who drink soda (non-diet) at least once/day</td>
<td>11.7% (BRFSS, 2017)</td>
<td>10.2%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Teens (high school) who drink soda (non-diet) at least once/day</td>
<td>11.0% (YRBS, 2017)</td>
<td>9.6%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Infants who were breastfed exclusively at 6 months</td>
<td>30.6% (NIS, 2017)</td>
<td>42.4%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Infants who were breastfed exclusively through 3 months</td>
<td>57.4% (NIS, 2017)</td>
<td>64.9%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Infants who were ever breastfed</td>
<td>89.1% (NIS, 2017)</td>
<td>94.9%</td>
</tr>
<tr>
<td>Physical Activity and Nutrition</td>
<td>Infants still breastfeeding at 8 weeks</td>
<td>79.4% (PRAMS, 2016)</td>
<td>90.5%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults in Hawai‘i</td>
<td>13.4% (BRFSS, 2018)</td>
<td>5%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among Native Hawaiian adults</td>
<td>22.3% (BRFSS, 2018)</td>
<td>8.3%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults with low income</td>
<td>22.1% (BRFSS, 2018)</td>
<td>8.2%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults who are unemployed</td>
<td>32.3% (BRFSS, 2018)</td>
<td>12%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults with low educational attainment (less than a HS diploma/GED)</td>
<td>26.4% (BRFSS, 2018)</td>
<td>9.8%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults with diagnosed depressive disorder</td>
<td>25.5% (BRFSS, 2018)</td>
<td>9.5%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults who reported at least 14 poor mental health days in the last 30 days</td>
<td>24.9% (BRFSS, 2018)</td>
<td>9.3%</td>
</tr>
<tr>
<td>PROGRAM AREA</td>
<td>LONG-TERM MEASURE</td>
<td>BASELINE</td>
<td>TARGET</td>
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</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults who reported excessive drinking</td>
<td>24.0% (BRFSS, 2018)</td>
<td>9%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among adults who identify as lesbian, gay, bisexual, or transgender</td>
<td>21.6% (BRFSS, 2018)</td>
<td>8.1%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among young teens (middle school)</td>
<td>3.9% (National YRBS, 2019)</td>
<td>3.4%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current cigarette use among teens (high school)</td>
<td>5.3% (National YRBS, 2019)</td>
<td>3.4%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current e-cigarette use among young teens (middle school)</td>
<td>17.7% (National YRBS, 2019)</td>
<td>10.5%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Current e-cigarette use among teens (high school)</td>
<td>30.6% (National YRBS, 2019)</td>
<td>10.5%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Young teens (middle school) who never tried smoking cigarettes</td>
<td>89.5% (National YRBS, 2019)</td>
<td>99.3%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Teens (high school) who never tried smoking cigarettes</td>
<td>82.2% (National YRBS, 2019)</td>
<td>91.2%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Young teens (middle school) who never tried e-cigarettes</td>
<td>69.4% (National YRBS, 2019)</td>
<td>77%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Teens (high school) who never tried e-cigarettes</td>
<td>51.7% (National YRBS, 2019)</td>
<td>57.4%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Adult awareness of Hawai‘i Tobacco Quitline Services</td>
<td>72.3% (BRFSS, 2018)</td>
<td>81%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Insurance plan coverage for smoking cessation</td>
<td>62.4% (BRFSS, 2015)</td>
<td>71.8%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Adults who tried to quit smoking</td>
<td>56.4% (BRFSS, 2018)</td>
<td>65.7%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Young teens (middle school) who tried to quit using tobacco in the last year</td>
<td>57% (YTS, 2019)</td>
<td>63.3%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Teens (high school) who tried to quit using tobacco in the last year</td>
<td>60% (YTS, 2019)</td>
<td>66.6%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Young teens (middle school) who have been exposed to secondhand smoke (SHS) in the home</td>
<td>27% (YTS, 2019)</td>
<td>24.0%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Teens (high school) who have been exposed to secondhand smoke in the home</td>
<td>30% (YTS, 2019)</td>
<td>26.7%</td>
</tr>
<tr>
<td>Tobacco</td>
<td>Adult who are exposed to SHS inside their living space from somewhere else in or around their building</td>
<td>No baseline</td>
<td>TBD</td>
</tr>
</tbody>
</table>
PARTNERS

The work of the HHSP is led by the Hawai‘i State Department of Health Chronic Disease Prevention and Health Promotion Division (CDPHPD). CDPHPD promotes health and reduces the burden of chronic disease by empowering communities, influencing social norms, and supporting and encouraging individuals to make healthy lifestyle choices.

CDPHPD utilizes an integrative and coordinated approach to assemble and unite partner agencies statewide to build a shared vision, implement strategies, and secure resources that will improve the health of the people of Hawai‘i. Contributions of time, energy, resources, and expertise are provided by the following partner agencies and organizations:

ADVISORY GROUP MEMBERS

The HHSP Advisory Group members are partners from across the state who provide input on the vision, purpose, and development process of the plan. Thank you to these respected leaders who offer valuable advice and expertise.

Alan Parsa  The Queen’s Medical Center
Amy Asselbaye  City and County of Honolulu
Brian Wu  Hawai‘i Medical Service Association
Bryan Juan  Hawai‘i Primary Care Association
Carl Barton  Derigo Health
Catherine Pirkle  University of Hawai‘i (UH) Office of Public Health Studies
Christina Simmons  YMCA of Honolulu
Cory Chun  Formerly with the American Cancer Society
Cristeta Ancog  Pediatrician
Cristina Vocalan  Hawai‘i Primary Care Association
Cynthia Au  American Cancer Society
Don Weisman  American Heart Association
Jennifer Ryan  Hawai‘i State Department of Education
Jessica Yamauchi  Hawai‘i Public Health Institute
Joseph Humphry  Internal Medicine Physician
Kristen Frost Albrecht  The Food Basket
Marie Williams  County of Kaua‘i
Mark Garrity  Urban Pacific Consulting, LLC
May Kealoha  University of Hawai‘i
May Okihiro  Pediatrician
May Rose Dela Cruz  UH Office of Public Health Studies
Monica Esquivel  UH Dept. of Human Nutrition, Food and Animal Sciences
Naomi Fukuda  The Queen’s Medical Center
Paula Higuchi  UH Cancer Center
Ron Sanderson  American Lung Association
Shane Morita  The Queen’s Medical Center
Sheri-Ann Daniels  Papa Ola Lokahi
Tetine Sentell  UH Office of Public Health Studies
Valerie Davison  UHA Health Insurance
PROGRAM AREA PARTNERS
Thank you to the numerous individuals and organizations who contributed to the development of this plan. These diverse and esteemed partners are listed in the following comprehensive, chronic disease strategic plans for the state.

» Hawai‘i Asthma Plan 2030  
» Hawai‘i Cancer Plan 2030  
» Hawai‘i Diabetes 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

PARTNERS IN COMMON
CDC’s National Center for Chronic Disease Prevention and Health Promotion – established to build and strengthen state health department capacity and expertise to effectively prevent chronic disease and promote health

FACILITATOR
Dave Nakashima
**LIST OF ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AHA</td>
<td>American Heart Association</td>
</tr>
<tr>
<td>ASME</td>
<td>Asthma Self-Management Education</td>
</tr>
<tr>
<td>BMI</td>
<td>Body Mass Index</td>
</tr>
<tr>
<td>BRFSS</td>
<td>Behavioral Risk Factor Surveillance System</td>
</tr>
<tr>
<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
</tr>
<tr>
<td>CDPHPD</td>
<td>Chronic Disease Prevention and Health Promotion Division</td>
</tr>
<tr>
<td>CHW</td>
<td>Community Health Worker</td>
</tr>
<tr>
<td>DOE</td>
<td>Department of Education</td>
</tr>
<tr>
<td>DOH</td>
<td>Department of Health</td>
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<tr>
<td>DPCP</td>
<td>Diabetes Prevention and Control Program</td>
</tr>
<tr>
<td>DPP</td>
<td>Diabetes Prevention Program</td>
</tr>
<tr>
<td>DSMES</td>
<td>Diabetes Self-Management Education and Support Services</td>
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<tr>
<td>EBI</td>
<td>Evidence-Based Intervention</td>
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<tr>
<td>ECE</td>
<td>Early Childhood and Education</td>
</tr>
<tr>
<td>ESD</td>
<td>Electronic Smoking Device</td>
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<tr>
<td>FQHC</td>
<td>Federally Qualified Health Center</td>
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<tr>
<td>HCCC</td>
<td>Hawai‘i Comprehensive Cancer Coalition</td>
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<tr>
<td>HHSP</td>
<td>Healthy Hawai‘i Strategic Plan</td>
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<tr>
<td>HIT</td>
<td>Health Information Technology</td>
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<tr>
<td>HMSA</td>
<td>Hawai‘i Medical Service Association</td>
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<tr>
<td>HPCA</td>
<td>Hawai‘i Primary Care Association</td>
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<tr>
<td>HPV</td>
<td>Human Papillomavirus</td>
</tr>
<tr>
<td>HRSA</td>
<td>Health Resources Services Administration</td>
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<tr>
<td>LGBTQ</td>
<td>We acknowledge the limited representativeness of this acronym and recognize all sexual and gender minority communities, including but not limited to lesbian women, gay men, bisexual, transgender, and queer or questioning people.</td>
</tr>
<tr>
<td>MTM</td>
<td>Medication Therapy Management</td>
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<tr>
<td>PAN</td>
<td>Physical Activity and Nutrition</td>
</tr>
<tr>
<td>PSE</td>
<td>Policy, Systems and Environmental Change</td>
</tr>
<tr>
<td>SMART</td>
<td>Specific, Measurable, Achievable, Relevant, and Time-Bound</td>
</tr>
<tr>
<td>UH</td>
<td>University of Hawai‘i</td>
</tr>
<tr>
<td>UHA</td>
<td>University Health Alliance</td>
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<tr>
<td>U.S.</td>
<td>United States</td>
</tr>
<tr>
<td>VFC</td>
<td>Vaccines For Children</td>
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</tbody>
</table>
REFERENCES


6 Sentell T, Choi SY, Ching L, Quensell M, Keliikoa LB, Corriveau É, et al. Prevalence of Selected Chronic Conditions Among Children, Adolescents, and Young Adults in Acute Care Settings in Hawai’i. Prev Chronic Dis 2020;17:190448. DOI: https://doi.org/10.5888/pcd17.190448


17 Hawai’i Health Information Corporation (2016).


David Ige, Governor of Hawai‘i
Elizabeth A. Char, M.D., Director of Health

For more information contact:
Hawai‘i State Department of Health
Chronic Disease Prevention and Health Promotion Division
1250 Punchbowl St. Room 422
Honolulu, Hawai‘i 96813
PHONE: (808) 586-4488

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