

Hawai'i Physical Activity and Nutrition Plan

2013-2020



Letter from the Director

Aloha,

I am pleased to present the 2013-2020 Hawai'i Physical Activity and Nutrition Plan (PAN Plan 2020), which identifies priority objectives to integrate physical activity and nutrition into the daily lives of the people of Hawai'i. Physical activity and healthy eating helps prevent obesity and chronic diseases, such as diabetes, cardiovascular disease, asthma, and some cancers. The twenty-two objectives in the PAN Plan 2020 will help create environments and policies that ensure daily physical activity and healthy eating are the norm for Hawai'i residents. The goal is to implement all of these objectives by the year 2020.

Healthy eating and physical activity, along with living tobacco free, are protective behaviors from weight gain and chronic diseases. While considerable work has been done since the first PAN Plan (2007-2012), data shows there is much more work to do. About one in three of Hawai'i's children entering kindergarten and more than one in two adults are overweight or obese. In 2009, the state medical cost attributable to obesity was \$470 million dollars, and this figure continues to rise. As many as 1 in 3 adults could have diabetes by 2050 if current trends continue. These staggering statistics illustrate the need for this plan to become a top priority for our state.

The PAN Plan 2020 is the work of a large and diverse group of stakeholders including representatives from public health, community organizations, healthcare professionals, businesses, city planners, school educators and administrators, and many others. It is intended to provide a consistent strategic approach to reach shared goals, created and adopted by partners across the state. Implementation of the plan will require strong and consistent collaboration and partnerships to reach the stated objectives.

I thank our partners and welcome new partners to work together to achieve the vision of, "Healthy People, Healthy Communities, Healthy Hawai'i."

Sincerely,



Loretta J. Fuddy, ACSW, MPH

Director of Health

Hawai'i State Department of Health

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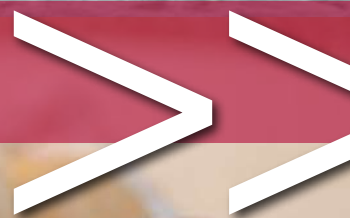
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Executive Summary

In Hawai‘i and the rest of the United States, there is a lack of physical activity and healthy eating practices among the majority of adults, adolescents, and children. In 2011, more than 76 percent of adults in Hawai‘i did not meet the recommended guidelines for physical activity. Additionally, more than 75 percent of Hawai‘i high school students and 80 percent of middle school students did not get the recommended amount of physical activity for youth (60 or more minutes per day). Fruit and vegetable consumption is also far below recommended amounts (five to nine servings a day). In 2011, nearly 81 percent of adults and nearly 83 percent of teens ate fewer than five fruits and/or vegetables a day.

Insufficient physical activity combined with unhealthy eating can substantially increase the risk of health problems such as obesity, high blood pressure, heart disease, diabetes, cancer, and arthritis. In 2011, almost 22 percent of Hawai‘i adults were considered obese and only 40 percent had a healthy body weight. Native Hawaiians and Other Pacific Islanders had the highest obesity rate at nearly 41 percent.

Hawai‘i can significantly increase physical activity and improve nutrition through collaborative, coordinated efforts of organizations, governments, and individuals working together to implement this updated Physical Activity and Nutrition Plan. Over 200 stakeholders from across the state provided guidance, expertise, and input for this plan. It focuses primarily on policy, systems, and environmental changes that will transform our communities, schools, work places, and health care so the healthy choice will be the easy choice.



*With good health, we are able to fully enjoy and perpetuate
the amazing quality that life in Hawai‘i offers!*

Vision

We envision a future for Hawai‘i in which all residents are physically active, eat healthy foods, and live in healthy communities.

Goals

Through healthful eating and regular physical activity, Hawaii residents will:

1. Reduce their burden of disease;
2. Increase years of healthy life; and
3. Reduce health disparities.

PAN Plan 2020 Objectives

Some objectives have been slightly abbreviated. For complete wording, please see the Section 3: Vision, Goals and Objectives.

Statewide Media/Social Marketing

Objective 1: Develop and implement a coordinated statewide media plan to promote healthy eating and active living.

Community Design and Access

Physical Activity

Objective 2: Designate and allocate a minimum of 10% of federal and state highway transportation funds to implement complete streets, bicycle and pedestrian plans, greenbelt and trail systems, and Safe Routes to School programs.

Objective 3: Implement state and county-level “complete streets” policies.

Objective 4: Develop and implement processes at the state and by every county to include physical activity priorities when determining building design and location, land-use planning, and transportation decisions (e.g., revise, disseminate, and utilize the Healthy Community Design Assessment/Checklist).

Objective 5: Increase by 10% the percentage of people who use active transportation to commute to work or school by expanding opportunities for active transportation (e.g., bike share programs, public transit, transit-oriented development, Safe Routes to School, Work and Recreation).

Nutrition

Objective 6: Increase to 80%, the number of farmers markets that accept Supplemental Nutrition Assistance Program (SNAP) Electronic Benefit Transfer (EBT) transactions.

Objective 7: Enact at least two statewide policies to increase access to healthy food and decrease access to unhealthy food/drinks.

Objective 8: Define and identify issues related to access and consumption of healthy food in each county and develop strategies to address them.

Educational Systems

Objective 9: Require quality, comprehensive Health and Physical Education in Department of Education schools.

Objective 10: Establish a data collection system to measure, track, and report student health data.

Objective 11: Assess, develop, and enact child care license requirements and create child care wellness guidelines to establish minimum standards based on national recommendations for childhood obesity prevention (e.g., physical activity, healthy foods, breastfeeding support, and screen time).

Objective 12: Increase educational opportunities for students and staff to learn about nutrition and agriculture.

Objective 13: Develop and implement standards to increase access to healthy drinking water at all schools.

Objective 14: Prohibit sugar-sweetened beverages on school campuses during instructional time.



Worksite, Industry, Business

- Objective 15:** Establish at least two statewide policies designed to increase the number of worksites offering wellness programs for their employees and/or support program implementation.
- Objective 16:** Develop a statewide infrastructure to provide worksite wellness resources and technical assistance to employers.
- Objective 17:** Increase the number of residents who complete a health risk assessment through their employer or employer's insurance plan.

Health Care Systems

- Objective 18:** Incentivize health promotion and disease prevention through a combination of mechanisms, including but not limited to: a) paying for performance, b) adopting patient centered medical home approaches, c) maximizing use of community care network, and d) offering shared savings.
- Objective 19:** Routinely assess patients' weight and risk status through standard biometric measurements (Body Mass Index, waist circumference, etc.) and provide appropriate nutrition and physical activity counseling and/or referrals by all primary care practitioners.
- Objective 20:** Increase to 50% the percentage of overweight and obese adults in Hawai'i who report being asked about their weight by their health care provider in the last year.
- Objective 21:** Modify health insurance benefits to allow for reimbursement, for those with a BMI of 30 or higher for adults and BMI at or above the 95th percentile for children, for registered dietitian and physical activity services to assist with proper nutrition and physical activity.
- Objective 22:** Increase by 20% the duration of exclusive breastfeeding through six months by adopting policies and practices that support breastfeeding.

Introduction

Purpose of the Plan

The Hawai‘i Physical Activity and Nutrition Plan 2020 (PAN Plan 2020) was developed as a rallying document for action for all who want to make a difference. Hawai‘i is viewed as a healthy state when compared to other states on many indicators of morbidity and mortality. However, obesity rates are rising sharply statewide, with unacceptably high rates of obesity in most population groups. Nearly one third of children entering Kindergarten are already overweight or obese, and the rates remain similarly high among students enrolled in public secondary schools. The rates of overweight among adults are much higher, with over half of adults exceeding acceptable Body Mass Index (BMI) standards. The state’s leanest adult population is comprised of adults 65 years and older, suggesting that Hawai‘i is not likely to maintain its ranking among the healthiest states without drastic measures.

The PAN Plan 2020 describes strategies to increase physical activity and healthy eating, with long-term goals of reducing overweight, obesity, and chronic disease among all Hawai‘i residents. Its purpose is to provide a framework for policy makers, public and private organizations, and community members to work together to educate, advocate for policies, and build an environment that allows our residents to embrace a physically active and nutritionally sound lifestyle. The PAN Plan 2020 was created by and for community-based organizations, public health professionals, elected officials, and other decision-makers to address obesity prevention, physical activity, and nutrition in the following ways:

- Provide information to guide evidence-based decision-making for physical activity and nutrition policies and practices
- Provide direction for work on sustainable changes so that daily physical activity and healthy eating become the norm for every Hawai‘i resident
- Increase awareness among key decision-makers at the state and local levels of statewide obesity trends, and physical activity and nutrition behaviors
- Provide baseline measures for health-related objectives to measure and evaluate progress towards stated goals
- Serve as a resource for developing action plans to address physical activity and nutrition at the state, county, and local levels
- Strengthen multi-sectoral funding at the state, county, and local levels

The PAN Plan 2020 represents the work of subject matter experts, public health officials, nonprofit agencies, educators, and community representatives. Fulfilling the mission of the plan requires a shared common vision for a healthy future, which can be accomplished through innovative collaboration, broad partnerships, and resource-sharing. Ultimately, this approach will contribute to the prevention of obesity, chronic disease, and premature deaths from conditions such as cardiovascular disease, diabetes, and cancer.

The PAN Plan 2020 is the result of lessons learned with partners from the implementation of the previous PAN Plan, reflects milestones achieved, and is based on the increasing body of research available on effective policies and best practices for improving physical activity and nutrition. Experts from public health, health policy, nutrition, physiology, behavioral science, health economy, and other arenas have concluded that without comprehensive policy, systems, and environmental changes, efforts to normalize healthy eating and active living, and reverse the obesity epidemic cannot succeed. Therefore the objectives in the plan are multi-sectorial and inter-dependent, and when achieved, people will have the support to make healthy choices where they live, work, learn, and play.

Planning Process

In March 2012, a small planning committee was convened to start the process of revising and developing the PAN Plan 2020. The planning committee consisted of stakeholders from the Healthy Hawai'i Initiative, the University of Hawai'i, Office of Public Health Studies, and an independent contractor from the community specializing in physical activity, nutrition, and obesity prevention. The planning committee developed a scope of work that met the needs of the plan revision, and met on a weekly basis for over a year to prepare and finalize deliverables.

Within the planning process, the overarching goal was to redesign objectives for the revised plan that were based on the following principles:

- 1) Focused on policy, systems, and environmental changes throughout the state;
- 2) Measureable through existing tools or impending instruments; and
- 3) Implementable given capacity and resources in the state.

Throughout the Spring of 2012, the planning committee developed and outlined an implementation process, identified sectors for the PAN Plan 2020, developed documents to provide an overview of each sector and illustrate evidence-based best practices.

Stakeholder Involvement

Eight well-respected experts from all over the state were invited to serve as either chairperson or vice-chairperson for one of the four sector areas, specifically *community design and access*, *worksite/industry/business*, *educational systems*, and *healthcare systems*. The following members of the community participated as chairs/vice-chairs for their respective sectors:

- Community Design and Access: Chair: Brad Kurokawa, Vice-Chair: Dr. Corilee Watters
- Worksite, Industry & Business: Chair: Selene LeGare, Vice-Chair: Betsy Scheller
- Educational Systems: Chair: Dr. Ku'ulei Serna, Vice-Chair: Curt Okimoto
- Healthcare Systems: Chair: Dr. Virginia Pressler, Vice-Chair: Dr. Robert Hirokawa

In August 2012, the planning committee met with the sector chairs and vice-chairs to present current data, outline evidence based practices, discuss priority objectives, outline their roles and responsibilities as chairs/vice-chairs, and have them work with members of the planning committee to draft objectives for the plan.

The chairs and vice-chairs outlined preliminary objectives and submitted them to the planning committee. Some of the chairs vetted the objectives among other colleagues/key informants. The planning committee further refined the objectives and incorporated priorities from the Institute of Medicine's report *Accelerating Progress in Obesity Prevention: Solving the Weight of the Nation*, feedback from the Chronic Disease Coordinated Plan meetings held in each county earlier in the year, suggestions from the University of Hawaii (UH), Office of Public Health Studies, and the preliminary recommendations from the State Childhood Obesity Prevention Taskforce.

In September 2012, the Department of Health reached out to a broad spectrum of stakeholders throughout the state to seek volunteers in the community interested in participating in advisory workgroups to provide feedback to one or more specific sectors. One hundred and thirteen stakeholders expressed interest in working on one or more sectors (community design and access, nutrition - 36, community design and access, physical activity - 41, worksite, industry & business - 39, educational systems - 33, and health care systems - 41).

After obtaining the list of participants for each workgroup, the planning committee developed a survey in December 2012 to distribute to the sector workgroup members and chairs/vice-chairs to collect additional feedback on the initial plan objectives. Participants were asked if the objective was a priority or interest to their organization and if the wording needed revision. They were also asked to identify gaps or missing priorities and to add general comments or other recommendations. Ninety-eight (98) responses were received providing comments, suggesting changes in language, and identifying gaps. These comments were incorporated into the next set of revisions and two more objectives were developed in January 2013. This draft list of 22 objectives was sent to approximately 1,000 stakeholders for final feedback in February 2013. One-hundred and seventy two (172) people responded and feedback was incorporated into the final version of the objectives. Respondent comments will also be integrated into the implementation planning.

Theoretical Framework for the Plan: The Social Ecological Model

The PAN Plan 2020 structure relies on the Social Ecological Model, with emphasis on policy, systems, and environmental change. The Social Ecological Model (Figure 1) is a theoretical paradigm that takes a broad view of behaviors, and works from the premise that “understanding health promotion includes not only educational activities, but also advocacy, organizational change efforts, policy development, economic supports, environmental change, and multi-method strategies.”² This ecological perspective highlights the need to approach public health challenges on multiple levels and stresses interaction and integration of factors within and across all levels. The levels of influence within the Social Ecological Model include the individual, interpersonal, organizational, community, and society (Table 1). Changes in individual behavior will come about through a combination of societal, community, organizational, interpersonal, and individual efforts. Effective obesity prevention initiatives should address multiple levels of the environment and engage multiple sectors of society in order to effect social change and achieve health impact. To be most effective and to align with the Centers for Disease Control and Prevention’s (CDC) national priorities and direction, the focus of the PAN Plan 2020 is on policy, systems, and environmental changes in various settings and at all levels of government (i.e. local, state, and federal).

Figure 1. Social-Ecological Model

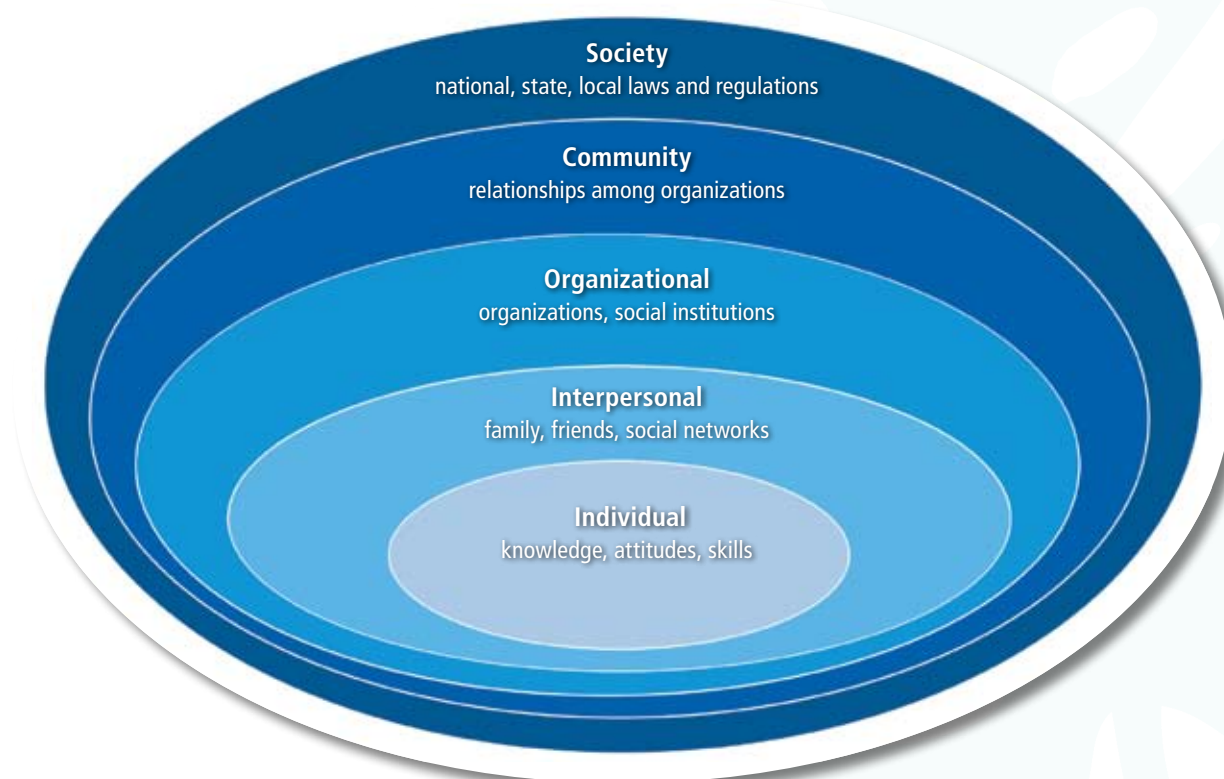


Table 1. The following table displays examples of public health interventions at each level of the Social Ecological Model.

Level	Examples	Public Health Interventions
Individual	Individual	Public health education that involves changing people's awareness, knowledge, values, beliefs, attitudes, and preferences (e.g., media campaigns)
Interpersonal	Small groups, such as families, friends, jogging groups, etc.	Public health education that involves changing people's awareness, knowledge, values, beliefs, attitudes, and preferences, in particular, health education that emphasizes behavior change through social support (e.g., walking with a friend)
Organizational	Schools, places of employment, places of worship, sports teams, volunteer groups, etc.	Public health education; creation of organizational policies and environmental change that encourage physical activity and healthy eating (e.g., healthy school lunch policy, stairwell campaign at work)
Community	Neighborhoods, counties, cities	Advocacy, policy, and legislation that create sidewalks, bike lanes, farmers markets, and improvements to parks
Society	All levels working together for large-scale change	Advocacy, policy, and legislation that create statewide school policies, statewide building codes, changes to regulations, etc.

The Four Sectors and Media

The bulk of the Plan is organized by sector, specifically *community design and access*, *worksite/industry/business*, *educational systems*, and *healthcare systems*. This approach is common among obesity prevention programs nationwide since the causes of obesity are complex and solutions must occur at all levels of the social ecological model in multiple settings such as communities, schools, workplaces, and health care facilities. Policies, systems, and/or environmental changes can be made in each of these settings whereby the healthy options become the easy choices for Hawai'i residents. The topic area of media was added to the plan because raising awareness and knowledge among individuals is important and ensures that strategies are targeted at all levels of the social ecological model.

Description of the Problem

Physical inactivity and poor nutrition are the most common behavioral risk factors associated with obesity and many chronic diseases. Individuals who are at a healthy weight are less likely to:

- Develop chronic disease risk factors, such as high blood pressure and dyslipidemia.
- Develop chronic diseases, such as type 2 diabetes, heart disease, osteoarthritis, and some cancers.
- Experience complications during pregnancy.
- Die at an earlier age.^{3,4,5}

Health disparities exist when a health outcome is seen to a greater or lesser extent between population groups. Race or ethnicity, sex, sexual identity and orientation, age, disability, socioeconomic status, and geographic location all contribute to an individual's ability to achieve good health. It is important to recognize the existence of health disparities and to prioritize population groups experiencing a greater proportion of adverse health outcomes when implementing public health interventions.

Physical Activity

Regular physical activity is important for overall health and well-being. Among adults, physical activity can lower the risk of premature death, chronic disease, some forms of cancer, falls and associated injuries, and depression. For children and adolescents, physical activity can improve bone health, cardio-respiratory fitness and muscle strength, and reduce body fat and symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits. The CDC recommends:

Adults need at least:

2 hours and 30 minutes
(150 minutes) of moderate-
intensity aerobic activity
(e.g., brisk walking) every
week **AND** muscle-
strengthening activities
on 2 or more days a week that
work all major muscle groups
(legs, hips, back, abdomen,
chest, shoulders, and arms).

or

1 hour and 15 minutes
(75 minutes) of vigorous-
intensity aerobic activity
(e.g., jogging or running)
every week **AND** muscle-
strengthening activities
on 2 or more days a week that
work all major muscle groups
(legs, hips, back, abdomen,
chest, shoulders, and arms).

or

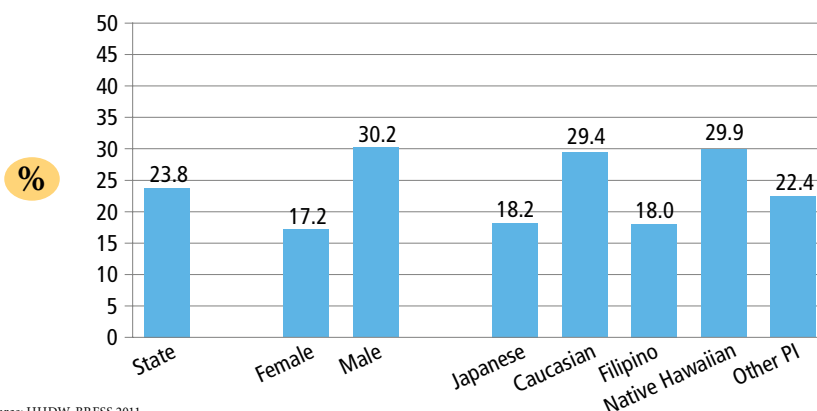
An equivalent mix of
moderate- and vigorous-intensity
aerobic activity AND muscle-
strengthening activities
on 2 or more days a week that
work all major muscle groups
(legs, hips, back, abdomen, chest,
shoulders, and arms).

Children and adolescents (6-17 years of age) need at least:

60 minutes of physical activity per day **INCLUDING** muscle strengthening
and bone strengthening activities at least 3 times per week.

Physical Activity Data

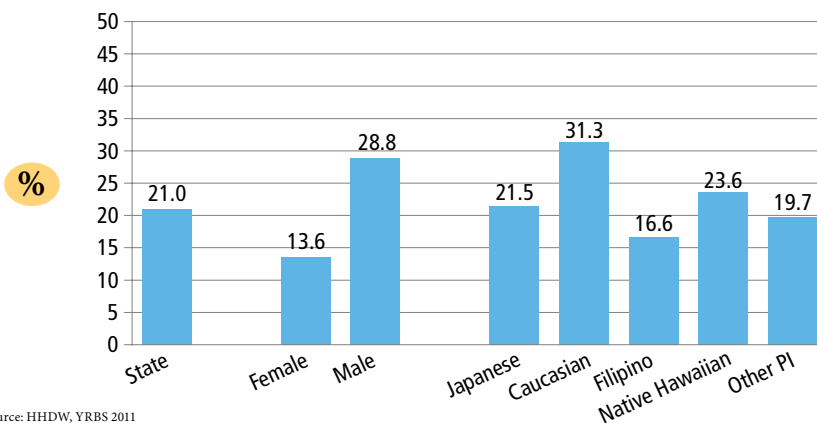
Adults Meeting Aerobic & Strengthening Physical Activity Recommendations



Adults

Nearly 60 percent of Hawai'i adults meet the aerobic physical activity guidelines (data not shown), and 32 percent meet the guidelines for muscle strengthening, but when these two are combined, less than one quarter (23.8%) meet the recommended guidelines for physical activity that includes muscle strengthening activities. Males are more likely (30.2 %) to meet the recommended guidelines than females (17.2%). By race/ethnicity, almost 30 percent of Native Hawaiians and Caucasians meet the guidelines, followed by 22.4 percent of Other Pacific Islanders (PI) and about 18 percent of Japanese and Filipinos.

High School Students Meeting Aerobic Physical Activity Recommendations



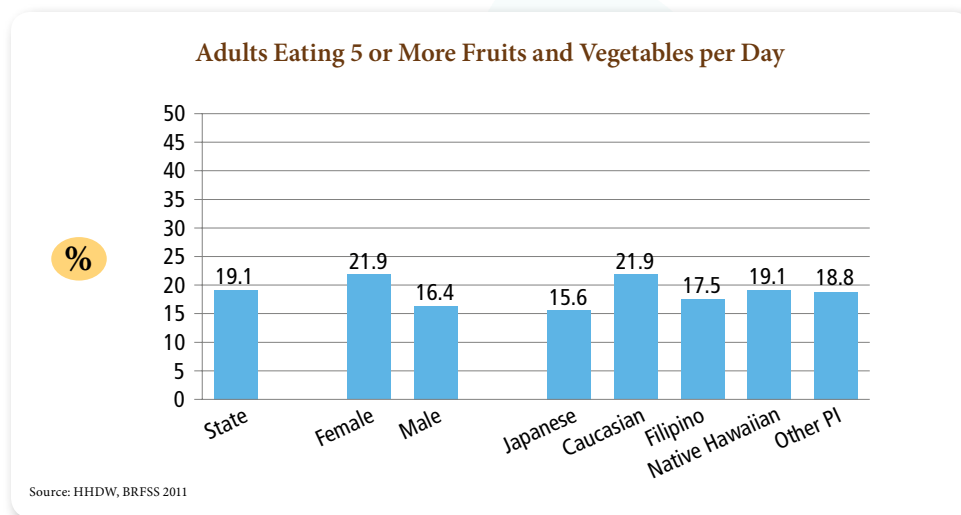
Youth

Only 21 percent of Hawai'i high school youth get the recommended amount of aerobic physical activity (60 minutes per day). Males are twice as likely as females to meet recommendations, 28.8 percent and 13.6 percent respectively. By race/ethnicity, Caucasians (31.3%) are the most active, followed by Native Hawaiians (23.6%), Japanese (21.5%), Other Pacific Islanders (19.7 %), and Filipinos (16.6 %).

Nutrition

Good nutrition is important for children to thrive and grow, and for adults to maintain healthy weight and wellness. A healthful diet includes a variety of nutrient-dense foods, especially whole grains, fruits, vegetables, low-fat or fat-free milk or milk products, and lean meats, legumes, and other protein sources. The United States Department of Agriculture (USDA) dietary guidelines have changed over time, however one recommendation has remained constant; the diet should be rich in fruits and vegetables. Currently, USDA recommendations for fruit and vegetable consumption are based on age, sex, and physical activity level. Surveys of fruit and vegetable consumption show that the majority of people need to eat more fruits and vegetables. According to the USDA Dietary Guidelines for Americans, MyPlate illustration (www.choosemyplate.gov) fruits and vegetables should make up half of each meal and snack.

Fruit and Vegetable Consumption Data

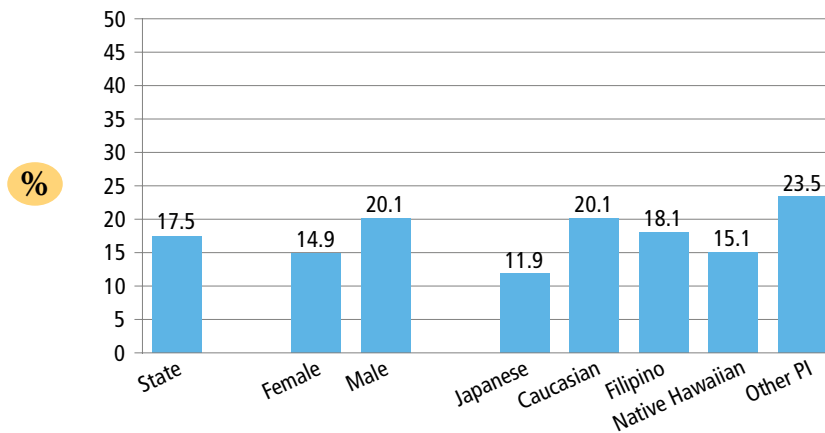


Adults

Less than one fifth (19.1%) of Hawai'i adults eat at least five fruits and/or vegetables per day. More females (21.9%) eat 5-a-day than males (16.4%). There is not a lot of variation by race/ethnicity, although Japanese residents are somewhat less likely to eat five fruits and/or vegetables a day.



High School Students Eating Fruits and Vegetables 5 or More Times per Day



Source: HHDW, VRBS 2011

Youth

Very few youth eat the recommended amount of fruits and vegetables each day. Less than 18% of Hawai'i high school youth eat 5 or more fruits and/or vegetables a day. One in five males and less than one in six females meet the recommendations. There is some variation by race/ethnicity; almost one in four Other Pacific Islanders eat 5-a-day compared to one in nine Japanese youth.

Overweight and Obesity

The impact of overweight and obesity is significant. Approximately two thirds of the US adult population is overweight or obese. During the past 20 years, there has been a dramatic increase in obesity in the United States, although in past few years rates have somewhat stabilized. Recent estimates conclude that more than one-third of U.S. adults (or 110 million) and almost 17% (or 12.5 million) of children and adolescents aged 2-19 years are obese. The medical care costs of obesity in the United States are staggering. In 2008 dollars, these costs totaled about \$147 billion.⁹

Body mass index (BMI) is often used to assess weight status. BMI is calculated as weight in kilograms divided by height in meters squared, rounded to one decimal place. In the American system, $BMI = 703 * \text{Weight in pounds} / (\text{height in inches})^2$.

Obesity is defined as having an excessive amount of body fat, and is known to increase a person's risk for chronic diseases. Having a BMI greater than or equal to 30 in adults is associated with obesity. Obesity in children is not directly comparable with the BMI range for adults. In children, a BMI greater than or equal to the age- and sex-specific 95th percentiles found in the CDC growth charts corresponds with obesity.¹⁰

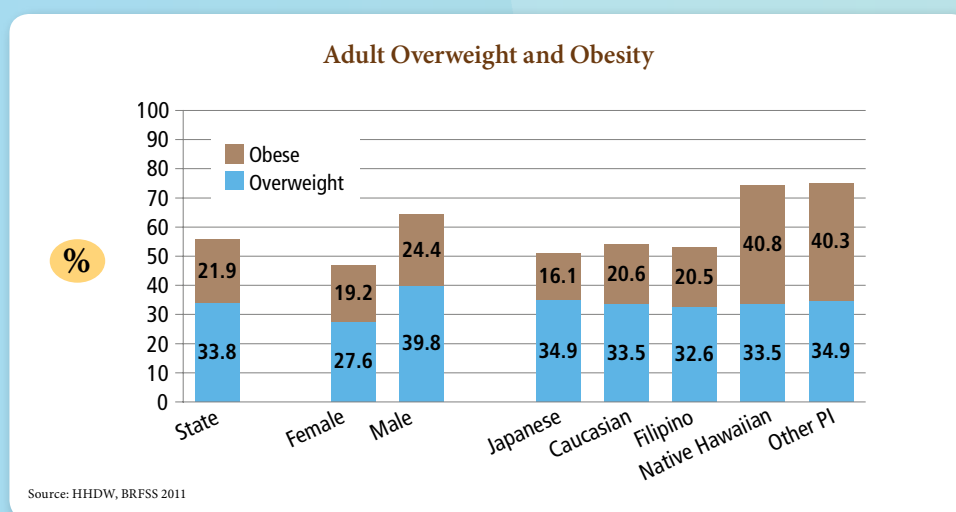


Category	BMI Range, Adults	BMI Percentile, 2-19 Years Old
Underweight	Less than 18.5	Less than the 5th percentile
Normal weight	18.6-24.9	5th percentile to less than the 85th percentile
Overweight	25-29.9	85th to less than the 95th percentile
Obese	30 and higher	95th percentile and higher

As a screening tool, BMI is just one indicator of potential health risks associated with being overweight or obese. For assessing an individual's likelihood of developing overweight- or obesity-related diseases, the National Heart, Lung, and Blood Institute guidelines recommend looking at two other predictors:

- The individual's waist circumference (because abdominal fat is a predictor of risk for obesity-related diseases).
- Other risk factors the individual has for diseases and conditions associated with obesity (for example, high blood pressure or physical inactivity).

BMI Data



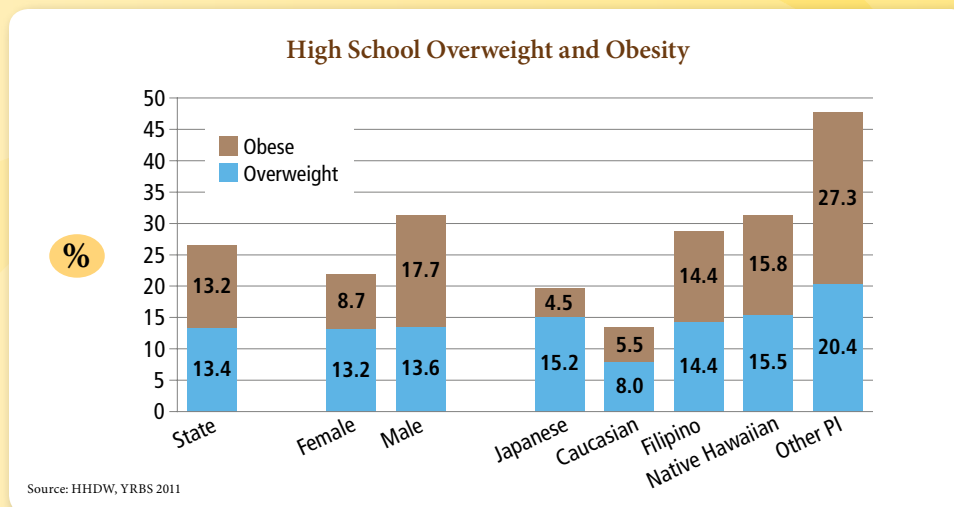
Adults

Nearly 56 percent of Hawai'i adults are overweight or obese; almost 22 percent are obese, and roughly 34 percent are overweight. Over 64 percent of males are overweight or obese compared to almost 47 percent of women. Japanese residents have the lowest obesity rate at 16.1 percent, followed by Filipinos (20.5%), and Caucasians (20.6%). Native Hawaiians have the highest obesity rate at 40.8 percent, followed closely by Other Pacific Islanders at 40.3 percent. Overweight/obesity affects approximately 75 percent of adults in both of these groups.

Youth

Please see graph on next page.

While there is no ongoing surveillance of overweight and obesity among elementary school students in Hawai'i, a 2007-08 study revealed that 28.6 percent of students were overweight or obese at kindergarten entry.¹¹



Slightly more than 13 percent of Hawai‘i high school youth are considered obese, and another 13.4 percent are overweight. When these rates are combined, 26.6 percent, or over one quarter of high school youth, are overweight or obese. Males are twice as likely to be obese as females (17.7% versus 8.7%). Obesity and overweight vary greatly by race/ethnicity; over one quarter of Other Pacific Islanders (27.3%) are obese, followed by 15.8 percent of Native Hawaiians, and 14.4 percent of Filipino youth. In contrast, 5.5 percent of Caucasians and 4.5 percent of Japanese youth are obese.

Annual data updates will be available on the PAN Tracker at <http://www.hawaiihealthmatters.org>

Vision, Goals, and Objectives

Vision

We envision a future for Hawai‘i in which all residents are physically active, eat healthy foods, and live in healthy communities.

Goals

Through healthful eating and regular physical activity, Hawai‘i residents will:

- Reduce their burden of disease;
- Increase years of healthy life; and
- Reduce health disparities.

Refined focus of this PAN plan (2013-2020)

The objectives and strategies to be included in this plan were designed to meet the following criteria:

- Focused on policy, systems, and environmental changes throughout the state;
- Measureable through existing tools or impending instruments; and
- Implementable given capacity and resources in the state.



Why are there no dates on the objectives?

The goal of this plan is to implement all of these objectives by 2020. Specific timelines for each objective will be assigned when implementation plans are created. PAN Plan implementation planning will begin at the PAN Summit in May 2013.

Objectives

Statewide Media/Social Marketing

Objective 1: Develop and implement a coordinated statewide media plan to promote healthy eating and active living.

Community Design and Access

Physical Activity

Objective 2: Designate and allocate a minimum of 10% of federal and state highway transportation funds to implement complete streets, bicycle and pedestrian plans, greenbelt and trail systems, and Safe Routes to School programs.

Objective 3: Implement state and county-level “complete streets” policies as evidenced by:

- Revising necessary zoning codes
- Updating roadway/design standards
- Developing implementation plans
- Developing, adopting, and tracking of performance measures

Objective 4: Develop and implement processes at the state and by every county to include physical activity priorities when determining building design and location, land-use planning, and transportation decisions (e.g., revise, disseminate, and utilize the Healthy Community Design Assessment/Checklist).

Objective 5: Increase by 10%, the percentage of people who use active transportation to commute to work or school by expanding opportunities for active transportation (e.g., bike share programs, public transit, transit-oriented development, Safe Routes to School, Work, and Recreation).

Nutrition

Objective 6: Increase to 80%, the number of farmers markets that accept SNAP EBT transactions.

Objective 7: Enact at least two statewide policies to increase access to healthy food and decrease access to unhealthy food/drinks.

Examples include:

- Remove general excise tax (GET) on fruits and vegetables to incentivize the purchase of healthy foods.
- Establish a tax on sugar-sweetened beverages, where revenue accrued is allocated to obesity prevention initiatives.

Objective 8: Define and identify issues related to access and consumption of healthy food in each county and develop strategies to address them.

Educational Systems

Objective 9: Require quality, comprehensive Health and Physical Education (PE) in DOE schools by:

- Reinstating required Health and Physical Education courses in all middle school grades.
- Requiring Health and Physical Education classes to be implemented according to national recommendations (American Association for Health Education, American School Health Association and National Association for Sport and Physical Education) for K-12.

- Conducting a Hawai'i State Assessment to promote and measure attainment of the Health and PE Content and Performance Standards in elementary, middle, and high school.
- Requiring secondary Health and Physical Education teachers to be certified to teach in their respective content areas.

Objective 10: Establish a data collection system to measure, track, and report student health data by:

- Increasing physical exam requirements to include grades 6 and 9, in alignment with the immunization schedule.
- Requiring evidence-based fitness testing in a minimum of three grades; at least once in elementary, middle, and high school.
- Expanding the use of the current Department of Education electronic student records system to include health data.

Objective 11: Assess, develop, and enact child care license requirements and create child care wellness guidelines to establish minimum standards based on national recommendations for childhood obesity prevention (e.g., physical activity, healthy foods, breastfeeding support, and screen time).

Objective 12: Increase educational opportunities for students and staff to learn about nutrition and agriculture by:

- Providing professional development on nutrition for school food services staff.
- Increasing by 10%, the number of schools with school gardens.
- Establishing positions in the Department of Education and the Department of Agriculture to support school gardens and agriculture education programs.

Objective 13: Develop and implement standards to increase access to healthy drinking water at all schools by:

- Establishing standards for access to free drinking water throughout the school day (e.g., minimum number of functioning water fountains, fountain-to-student ratios, availability throughout the school day, fountain locations, and water temperature).
- Tracking the number of schools that meet requirements.

Objective 14: Prohibit sugar-sweetened beverages on school campuses during instructional time.

Worksite, Industry, Business

Objective 15: Establish at least two statewide policies designed to increase the number of worksites offering wellness programs for their employees and/or support program implementation, such as:

- Developing incentives (e.g., tax incentive) for employers who have comprehensive wellness programs.
- Establishing and implementing statewide nutrition standards for foods and beverages in public venues (e.g., government buildings).



- Objective 16:** Develop a statewide infrastructure to provide worksite wellness resources and technical assistance to employers, such as:
- Expanding statewide recognition for worksites that adopt healthy practices and policies.
 - Implementing a comprehensive worksite wellness program in at least five of the largest employers in the state.
 - Employing a full-time worksite wellness coordinator within the State Department of Health and/or Employer-Union Trust Fund (EUTF).
- Objective 17:** Increase the number of residents who complete a health risk assessment through their employer or employer's insurance plan by:
- Conducting an educational campaign to increase completion of health risk assessments.
 - Encouraging insurance providers to make summary data available to worksites to use for wellness program planning and evaluation (e.g., health risk assessment and other data).

Health Care Systems

- Objective 18:** Incentivize health promotion and disease prevention through a combination of mechanisms, including but not limited to: a) paying for performance, b) adopting patient centered medical home approaches, c) maximizing use of community care network, and d) offering shared savings.
- Objective 19:** Routinely assess patients' weight and risk status through standard biometric measurements (BMI, waist circumference, etc.) and provide appropriate nutrition and physical activity counseling and/or referrals by all primary care practitioners.
- Objective 20:** Increase to 50% the percentage of overweight and obese adults in Hawai'i who report being asked about their weight by their health care provider in the last year.
- Objective 21:** Modify health insurance benefits to allow for reimbursement for those with a BMI of 30 or higher for adults and BMI at or above the 95th percentile for children, for registered dietitian and physical activity services to assist with proper nutrition and physical activity.
- Objective 22:** Increase by 20%, the duration of exclusive breastfeeding through six months by adopting policies and practices that support breastfeeding through activities, such as:
- Providing insurance reimbursement for lactation support services from a certified lactation consultant to assist with breastfeeding after delivery and/or hospital discharge.
 - Increasing the number of hospitals that adopt the Baby Friendly Hospital Initiative and/or the *Ten Steps to Successful Breastfeeding*.
 - Encouraging hospitals to no longer accept free formula and to eliminate distribution of free formula samples.
 - Increasing the number of lactation support services, both pre- and post-natal, for women and newborns with a certified lactation consultant.
 - Including basic breastfeeding support as a standard of care for midwives, obstetricians, family physicians, nurse practitioners, and pediatricians.

Next Steps

Implementation plans will be developed annually with partners so by each objective, there will be strategies and activities, timelines and stakeholders roles. The first implementation meeting will occur at the PAN Summit in May of 2013, coinciding with the unveiling of the PAN Plan 2020. There will be multiple opportunities for stakeholders to join the statewide task forces to participate in the implementation of the PAN Plan 2020. Existing county physical activity and nutrition coalitions will also be using this plan to guide their work at the county level. Organizations and individuals are encouraged to adopt and use the plan as a consistent strategic approach to achieve shared goals.

Surveillance and Evaluation

Surveillance and evaluation will play a critical role in understanding the effectiveness and progress in achieving our goals throughout the state in the next seven years. The Department of Health and the University of Hawai'i, Office of Public Health Studies will be responsible for conducting the evaluation for the PAN Plan 2020 implementation. The data will be gathered, analyzed, and results shared with stakeholders. Collectively the partners will be able to monitor progress, address gaps in health improvements, and prioritize next steps.

Advances aimed at reducing obesity and the risk of chronic disease require engagement and commitment across the sectors identified in this plan. The objectives represent the breadth of the systems changes needed across our society so all people experience equity in making healthy lifestyle choices. The Department of Health will work with partners to translate and disseminate the evaluation results to build the case for the fundamental shifts needed to change the obesity and chronic disease trajectory.

The following tables were developed to map out the measurements, benchmarks, data sources, and targets for each sector and respective objectives. In addition, to highlight the overarching, and long term goals, another table was developed to include key indicators of success to be monitored over time. Targets were set to coincide with Healthy People 2020 (HP2020) objective targets. In some instances, Hawai'i has already met or exceeded the HP2020 target. In those circumstances, an improvement of 10 percent was set for the new target. To accurately assess the impact and progress made throughout the state in the coming years, it will be imperative that stakeholders, representing all sectors in the community, collaborate to accurately measure and evaluate successes made at the individual, interpersonal, organizational, community, and societal levels. Updates and progress on these measures will be available at www.hawaiihealthmatters.org.



Physical Activity and Nutrition Long-Term Goals and Outcomes

GOALS - Through *healthful eating and regular physical activity*, Hawai‘i residents will:

- Reduce their burden of disease;
- Increase years of healthy life; and
- Reduce health disparities.

Goal	Measurement	Data Source	Baseline	Target
<i>Increase consumption of fruits and vegetables</i>	% of adults who have consumed fruits and vegetables five or more times per day	Behavioral Risk Factor Surveillance System (BRFSS)	19.1% (2011)	21.1%
	% of high school students who have consumed fruits and vegetables five or more times per day	Youth Risk Behavior Surveillance System (YRBSS)	17.5% (2011) *May need revised baseline in 2013	19.25%
<i>Increase access to healthcare services</i>	Adults with a usual source of health care	Behavioral Risk Factor Surveillance System (BRFSS)	82.7% (2011)	83.9% (HP 2020)
<i>Increase healthy body weight</i>	Adults with a healthy body weight	Behavioral Risk Factor Surveillance System (BRFSS)	40.4% (2011)	44% HP2020=33.9%
	High school and middle school students with a healthy body weight	Youth Risk Behavior Surveillance System (YRBSS)	73.4% (2011)	76%
<i>Increase physical activity</i>	Adults participated in 150 minutes or more of aerobic physical activity per week	Behavioral Risk Factor Surveillance System (BRFSS)	58.5% (2011)	64% HP2020=47.9%
	Adults participated in muscle strengthening exercises more than twice per week	Behavioral Risk Factor Surveillance System (BRFSS)	32.1% (2011)	35% HP2020=24.1%
	Adults participated in enough aerobic and muscle strengthening exercises to meet guidelines	Behavioral Risk Factor Surveillance System (BRFSS)	23.8% (2011)	26% HP2020=20.1%
	Adults participated in any physical activities outside of work in the past month	Behavioral Risk Factor Surveillance System (BRFSS)	78.7% (2011)	80.8 HP2020=67.4%
	High school students who meet physical activity guidelines (60+ min/day in past 7 days)	High School Youth Risk Behavior Survey (YRBS)	21.0% (2011)	23% HP2020=20.2%
	Middle school students who meet physical activity guidelines (60+ min/day in past 7 days)	Middle School Youth Risk Behavior Survey (YRBS)	25.0% (2011)	27.5 HP2020=20.2%

Goal	Measurement	Data Source	Baseline	Target
<i>Increase physical activity</i>	High school students who meet screen time recommendations (no more than 2 hrs/day)	High School Youth Risk Behavior Survey (YRBS)	68.3% (2011) 63.4% (2011)	<ul style="list-style-type: none"> • HP 2020 73.9% for TV • HP 2020 82.6%, computer
	Middle school students who meet screen time recommendations (no more than 2 hrs/day)	Middle School Youth Risk Behavior Survey (YRBS)	60.6% (2011) 62.5% (2011)	<ul style="list-style-type: none"> • HP 2020 86.8% for TV • HP 2020 100%, computer
<i>Increase health status</i>	Health status (Good or Better)	Behavioral Risk Factor Surveillance System (BRFSS)	85.0% (2011)	86.5%
<i>Decrease consumption of sugar-sweetened beverages</i>	Adults who drink non-diet soda or pop at least once per day	Healthy Hawai'i Initiative Mediators Survey; BRFSS	21.5% (2009) *May need revised baseline in 2013	15% *May need revised target, depending on new baseline in 2013
	Teens who drink non-diet soda or pop at least once per day	Youth Risk Behavior Surveillance System (YRBSS)	17.5% (2009)	15%
<i>Increase the duration of breastfeeding</i>	Infants who were breastfed at 6 months	National Immunization Survey	51.1% (2012)	60.6% (HP2020)
	Infants who were breastfed exclusively through 3 months	National Immunization Survey	42.6% (2012)	46.2% (HP2020)
	Infants who were ever breastfed	Hawai'i PRAMS	95.6% (2011)	99% HP2020=81.9%
	Infants breastfed for at least 8 weeks 2 months	Hawai'i PRAMS	78.2% (2011)	86.4% HP2020=75.0

Strategic Objective: Media

Objective 1: *Develop and implement a coordinated statewide media plan to promote healthy eating and active living.*

Measurement(s)	Data Source	Baseline	Target
Completion of a statewide media plan between 2013-2020; inclusive of: <ul style="list-style-type: none"> • Multiple partnerships in the community (*evidence of multi-sectoral partners) • Healthy eating AND physical activity • Establishment of a planning committee aimed at coordination, development, and implementation of the campaign(s) 	State of Hawai'i, Department of Health	N/A	One (1) or more coordinated statewide media plan around healthy eating and active living developed and implemented

Strategic Objectives: Community Design

Objective 2: *Designate and allocate a minimum of 10% of federal and state highway transportation funds to implement complete streets, bicycle and pedestrian plans, greenbelt and trail systems, and Safe Routes to School programs.*

Measurement(s)	Data Source(s)	Baseline	Target
Annual State transportation budget; Annual State/County funding designation towards complete streets, bicycle and pedestrian plans, greenbelt and trail systems, and Safe Routes to School programs.	State of Hawai'i, Department of Transportation	Safe Routes to School Funding (2012): \$933,567 Additional measures TBD	Safe Routes to School Funding: \$1,026,923 (2020) Additional measures TBD

Objective 3: *Implement state and county-level “complete streets” policies as evidenced by:*

- *Revising necessary zoning codes*
- *Updating roadway/design standards*
- *The development of implementation plans*
- *The development, adoption and tracking of performance measures*

Measurement(s)	Data Source(s)	Baseline	Target
Policy development and adoption statewide Development and adoption of a tracking system to define and monitor metrics and performance measures for complete streets implementation	State of Hawai'i, Department of Transportation, Department of Health; Public Works Division (Department of Accounting & General Services); County Departments of Planning and Public Works	(# of counties implementing complete streets) *To be determined based on development of metrics/performance measures and a systematic tracking system that is monitored annually	All counties implementing complete streets plans and policies Development and implementation of a tracking system of complete streets performance measures

Objective 4: *Develop and implement processes at the state and by every county to include physical activity priorities when determining building design and location, land-use planning and transportation decisions (e.g., revise, disseminate, and utilize the Healthy Community Design Assessment/Checklist).*

Measurement(s)	Data Source(s)	Baseline	Target
Development, Adoption, and Implementation of a) state plan b) county level plans	State of Hawai'i; Department of Transportation, Department of Health	N/A	One (1) Statewide plan; four (4) county level plans implemented

Objective 5: *Increase by 10%, the percentage of people who use active transportation to commute to work or school by expanding opportunities for active transportation (e.g., bike share programs, public transit, transit-oriented development, Safe Routes to School, Work, and Recreation).*

Measurement(s)	Data Source(s)	Baseline	Target
% of residents who commute to work by means of transportation (public transportation, car/truck/van, walked, bicycle, cab/motorcycle/other, worked at home)	American Community Survey (Table DP03)	Means of Transportation to Work (2011): Car, Van, or Truck: 81.3% Public transportation: 5.9% Walked: 4.9% Other: 3.3% Worked at home: 4.6% Means of Transportation to School: Baseline data will be collected in 2013 YRBS)	10% increase of people who use active transportation to work: 11.9% Means of Transportation to School, TBD

Objective 6: *Increase to 80%, the number of farmers markets that accept SNAP EBT transactions.*

Measurement(s)	Data Source(s)	Baseline	Target
# of farmers markets operating in Hawai‘i	State of Hawai‘i; Department of Health (SNAP program); Department of Human Services	Eighty-nine (89) operating farmers markets in the State (May 2012)	71 farmers markets (or 80%) have SNAP EBT machines
# of farmers markets in Hawai‘i with operating EBT systems accepting EBT vouchers		Twenty four (24) farmers markets operating EBT machines in the State (May 2012) # EBT machines per county: Oahu: 4 (*1 serves 3 markets) Kauai: 1 (serving 6 markets) Hawai‘i: 9 Maui: 3	

Objective 7: *Enact least two statewide policies to increase access to healthy food and decrease access to unhealthy food/drinks.*

Examples include:

- *Remove general excise tax (GET) on fruits and vegetables to incentivize the purchase of healthy foods*
- *Establish a tax on sugar-sweetened beverages, where revenue accrued is allocated to obesity prevention initiatives*

Measurement(s)	Data Source(s)	Baseline	Target
# of policies developed and adopted at the state level aimed to increase access to healthy food and decrease access to unhealthy food	State of Hawai‘i; Department of Health	0	Two (2) statewide policies adopted

Objective 8: *Define and identify issues related to access and consumption of healthy food in each county and develop strategies to address them.*

Measurement(s)	Data Source(s)	Baseline	Target
<p>Plan outlining strategies to address access to healthy foods in the state and each county.</p> <p>State and County Census data outlining access to healthy foods (based on the percent of residential ZIP codes in a county with a healthy food outlet, defined as grocery stores or produce stands/farmers' markets)</p>	<p>Department of Health; Department of Agriculture</p> <p>Additional Data Sources: US Census Bureau's Zip Code Business Patterns; USDA</p> <p>Definitions and strategies to be developed.</p>	<p>Definitions and strategies to be developed</p> <p>*Additional baseline data to be developed (State definition and strategies)</p>	<p>Definitions and strategies to be developed</p>

Strategic Objectives: Educational Systems

Objective 9: *Require quality, comprehensive Health and Physical Education in DOE schools by:*

- *Reinstating required Health and Physical Education courses in all middle school grades.*
- *Requiring Health and Physical Education classes to be implemented according to national recommendations (AAHE, ASHA and NASPE) for K-12.*
- *Conducting a Hawai'i State Assessment to promote and measure attainment of the Health and PE Content and Performance Standards in elementary, middle and high school.*
- *Requiring secondary Health and Physical Education teachers to be certified to teach in their respective content areas.*

Measurement(s)	Data Source(s)	Baseline	Target
<p>Policy development, adoption, and implementation, i.e.,</p> <ul style="list-style-type: none"> • Board of Education Policy: A required course in health and physical education annually in middle school • Board of Education Policy: Minutes of instructional physical education class (# minutes per week and/or minutes per hour) • Development of a monitoring system that assesses performance standards in elementary, middle, and high school • # of certified secondary Health and Physical Education teachers providing instruction at school(s) 	<p>State of Hawai'i; Department of Education (Board of Education), Department of Health</p> <p>National Association for Sport and Physical Education</p>	<p>N/A</p>	<p>Policies developed and adopted in schools that require comprehensive Health and Physical Education in DOE schools (*example evidence base illustrated in objective)</p>

Objective 10: *Establish a data collection system to measure, track, and report student health data by:*

- *Increasing physical exam requirements to include grades 6 and 9 in alignment with the immunization schedule.*
- *Requiring evidence-based fitness testing in a minimum of three grades; at least once in elementary, middle, and high school.*
- *Expanding the use of the current Department of Education electronic student records system to include health data.*

Measurement(s)	Data Source(s)	Baseline	Target
Policy development, adoption, and implementation <ul style="list-style-type: none">• State Policy: Increase physical exam requirements to include grades 6 and 9 in alignment with the immunization schedule.• State Policy: Mandatory evidence-based fitness testing in Physical Education classes in a minimum of three grades; at least once in elementary, middle, and high school.	State of Hawai‘i; Department of Education *Data collection system to be developed	N/A	Development, implementation, and adoption of a statewide data collection and tracking system for established policies Adoption and implementation of two (2) statewide policies

Objective 11: *Assess, develop, and enact childcare license requirements and create childcare wellness guidelines to establish minimum standards based on national recommendations for childhood obesity prevention (e.g., physical activity, healthy foods, breastfeeding support, and screen time).*

Measurement(s)	Data Source(s)	Baseline	Target
Policy development, adoption, and implementation	State of Hawai‘i; Department of Human Services American Association of Health Education	N/A	Established child care license requirement(s) Established wellness guideline(s) for early childhood



Objective 12: Increase educational opportunities for students and staff to learn about nutrition and agriculture by:

- Providing professional development on nutrition for school food services staff.
- Increasing by 10%, the number of schools with school gardens.
- Establishing positions in the Department of Education and the Department of Agriculture to support school gardens and agriculture education programs.

Measurement(s)	Data Source(s)	Baseline	Target
# of trainings to school food services staff	State of Hawai‘i;	# School food service trainings: to be developed	10% increase in school food service trainings (# to be determined)
# of schools with school gardens used for nutrition education	Department of Education, Department of Health; University of Hawai‘i, Healthy Hawai‘i Initiative Evaluation Team	# Schools that indicate they have a school garden : 175 (77.1%) schools (2011-2012)	87% of schools with school gardens
# of positions established within DOE and DOA supporting school gardens and agriculture education	School Food Services Evaluation	# Schools that have a school garden that is used for instruction: 167 (95.4%) (2011-2012)	Positions in Department of Education and the Department of Agriculture allocated to supporting school gardens and agriculture education programs.
	Safety and Wellness Survey (SAWS)		
	Hawai‘i School Garden Network		
	School Garden Hui Report		
	Hawai‘i Children Nutrition Program		

Objective 13: Develop and implement standards to increase access to healthy drinking water at all schools by:

- Establishing standards for access to free drinking water throughout the school day (e.g., minimum number of functioning water fountains, fountain-to-student ratios, availability throughout the school day, fountain locations and water temperature).
- Tracking the number of schools that meet requirements.

Measurement(s)	Data Source(s)	Baseline	Target
Established standards/policy on free drinking water throughout the school day	State of Hawai‘i; Department of Health; Department of Education	Standards to be developed.	DOE has Established standards/policy on minimum # of functioning water fountains
# of schools that meet standards for availability of water throughout the day	University of Hawai‘i, Healthy Hawai‘i Initiative Evaluation Team	# schools meeting the standards and requirements established for free drinking water at school	100% schools meet the standards for availability of water throughout the schools day
	Sugary Drinks Survey	# students (12-18 years old) reporting they drank from a water fountain	

Objective 14: *Prohibit sugar-sweetened beverages on school campuses during instructional time.*

Measurement(s)	Data Source(s)	Baseline	Target
# of schools that adopt DOE state policy on SSB consumption Statewide Department of Education (DOE) policy prohibiting SSB on campuses during instructional time	DOE policy to be developed	To be determined	100% schools prohibit SSB on campuses during instructional time

Strategic Objectives: Worksite, Industry, and Business

Objective 15: *Establish at least two statewide policies designed to increase the number of worksites offering wellness programs for their employees and/or support program implementation, such as:*

- *Developing incentives (e.g., tax incentive) for employers who have comprehensive wellness programs.*
- *Establishing and implementing statewide nutrition standards for foods and beverages in public venues (e.g., government buildings).*

Measurement(s)	Data Source(s)	Baseline	Target
Policy development, implementation, and adoption	State of Hawai‘i; Department of Health	N/A	Development and adoption of two (2) statewide policies

Objective 16: *Develop a statewide infrastructure to provide worksite wellness resources and technical assistance to employers, such as:*

- *Expanding statewide recognition for worksites that adopt healthy practices and policies.*
- *Implementing a comprehensive worksite wellness program in at least five of the largest employers in the state.*
- *Employing a full-time worksite wellness coordinator within the State Department of Health and/or Employer-Union Trust Fund (EUTF).*

Measurement(s)	Data Source(s)	Baseline	Target
Technical Assistance and resources provided by the Department of Health Development of a worksite wellness program and recognition program Establishment of a Worksite Wellness Coordinator within the State	State of Hawai‘i; Department of Health; Employer-Union Trust Fund (EUTF).	N/A	Technical Assistance and resources provided by the Department of Health Development of worksite wellness and recognition programs Establishment of a Worksite Wellness Coordinator within the State

Objective 17: *Increase the number of residents who complete a health risk assessment (HRA) through their employer or employer's insurance plan by:*

- *Conducting an educational campaign to increase completion of health risk assessments.*
- *Encouraging insurance providers to make summary data available to worksites to use for wellness program planning and evaluation (e.g., health risk assessment and other data).*

Measurement(s)	Data Source(s)	Baseline	Target
Development and Implementation of a health risk assessment educational campaign # of health risk assessments completed as reported by employers and/or insurance companies	State of Hawai'i; Department of Health; Union Trust Fund (EUTF); Kaiser Permanente; HMSA	To be developed	Development and Implementation of a HRA educational campaign HRAs completed as reported by employers and/or insurance companies (*baseline to be determined)

Strategic Objectives: Healthcare Systems

Objective 18: *Incentivize health promotion and disease prevention through a combination of mechanisms, including but not limited to: a) paying for performance, b) adopting patient centered medical home approaches, c) maximizing use of community care network, and d) offering shared savings.*

Measurement(s)	Data Source(s)	Baseline	Target
To be developed. Insurers reimburse health care providers and/or provide incentives for health promotion and disease prevention.	To be developed	N/A	To be developed

Objective 19: *Routinely assess patients' weight and risk status through standard biometric measurements (BMI, waist circumference, etc.) and provide appropriate nutrition and physical activity counseling and/or referrals by all primary care practitioners.*

Measurement(s)	Data Source(s)	Baseline	Target
<ul style="list-style-type: none"> • Primary care practitioners to routinely assess patients' weight and risk status through standard biometric measurements (BMI, waist circumference, etc.) • Primary care practitioners provide annual counseling to patients on nutrition and physical activity or refer them to appropriate sources. 	Health plans and/or providers in the State of Hawai'i; Department of Health; Potential to add to BRFSS a question that asks if counseling was received from their provider.	To be developed	To be developed

Objective 20: *Increase to 50% the percentage of overweight and obese adults in Hawai‘i who report being asked about their weight by their health care provider in the last year.*

Measurement(s)	Data Source(s)	Baseline	Target
Adults who are Obese	Behavioral Risk Factor Surveillance System (BRFSS)	21.9% (2011)	19.7% HP2020=30.6%
% of patients asked about their weight in the last year	BRFSS	To be developed	50% increase in the # overweight/ obese adults reporting they are asked about their weight by healthcare provider in the last year

Objective 21: *Modify health insurance benefits to allow for reimbursement for those with a BMI of 30 or higher for adults and BMI at or above the 95th percentile for children, for registered dietitian and physical activity services to assist with proper nutrition and physical activity.*

Measurement(s)	Data Source(s)	Baseline	Target
Policy developed and adopted requiring health insurance benefits to allow for reimbursement for registered dietitian and physical activity services (for those with a BMI of 30 or higher for adults and BMI greater or equal to 95th% for children)	Department of Health; Health Insurance Plans	To be developed	Policy developed and adopted

Objective 22: *Increase by 20%, the duration of exclusive breastfeeding through six months by adopting policies and practices that support breastfeeding through activities, such as:*

- *Providing insurance reimbursement for lactation support services from a certified lactation consultant to assist with breastfeeding after delivery and/or hospital discharge.*
- *Increasing the number of hospitals that adopt the Baby Friendly Hospital Initiative and/or the Ten Steps to Successful Breastfeeding.*
- *Encouraging hospitals to no longer accept free formula and to eliminate distribution of free formula samples.*
- *Increasing the number of lactation support services, pre and postnatal, for women and newborns with a certified lactation consultant.*
- *Including basic breastfeeding support as a standard of care for midwives, obstetricians, family physicians, nurse practitioners, and pediatricians.*

Measurement(s)	Data Source(s)	Baseline	Target
Infants who were breastfed at 6 months	National Immunization Survey	51.1% (2012)	60.6% (HP 2020)
Infants who were breastfed exclusively through 3 months	National Immunization Survey	42.6% (2012)	46.2% (HP 2020)
Infants who were breastfed exclusively through 6 months	National Immunization Survey	20.7% (2012)	25.5% (HP 2020)
Infants who were ever breastfed	National Immunization Survey	85.1% (2012)	93.6% 81.9% HP2020
Births occurring in <i>Baby-Friendly</i> facilities	Breastfeeding Report Card (CDC)	9.0% (2011) (1 in 12 hospitals)	100% births occurring in Baby-Friendly Hospitals
Policy development (1-5)	Department of Health Hospitals Health Insurance Companies	N/A	Policy to be developed

¹ Institute of Medicine (U.S.) Committee on Accelerating Progress in Obesity Prevention. Accelerating progress in obesity prevention: Solving the weight of the nation/Committee on Accelerating Progress in Obesity Prevention, Food and Nutrition Board, Institute of Medicine of the National Academies; Dan Glickman, et al. editors. 2012.

² McElroy, K. R., Bibeau, D., Steckler, A., Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15, 351-377.

³ National Institutes of Health (NIH); National Heart, Lung, and Blood Institute and National Institute of Diabetes and Digestive and Kidney Diseases. Clinical guidelines on the identification, evaluation, and treatment of overweight and obesity in adults: The evidence report. Bethesda, MD: NIH; 1998

⁴ World Health Organization (WHO). Obesity: Preventing and managing the global epidemic. Geneva: WHO; 1999.

⁵ Dietz WH. Health consequences of obesity in youth: Childhood predictors of adult disease. *Pediatrics*. 1998;101:518-24

⁶ Healthy People 2020, US Department of Health and Human Services. Washington DC.

⁷ US Department of Health and Human Services and US Department of Agriculture (USDA). Dietary guidelines for Americans, 2005. 6th ed. Washington: US Government Printing Office, 2005 Jan.

⁸ Cynthia L. Ogden, Ph.D.; Margaret D. Carroll, M.S.P.H.; Brian K. Kit, M.D., M.P.H.; and Katherine M. Flegal, Ph.D. Prevalence of Obesity in the United States, 2009–2010, NCHS Data Brief, no. 82, January 2012.

⁹ Finkelstein, EA, Trogon, JG, Cohen, JW, and Dietz, W. Annual medical spending attributable to obesity: Payer- and service-specific estimates. *Health Affairs* 2009; 28(5): w822-w831.

¹⁰ Ogden CL, Flegal KM. Changes in terminology for childhood overweight and obesity. National health statistics reports; no 25. Hyattsville, MD: National Center for Health Statistics. 2010.

¹¹ Pobutsky, Bradbury, Reyes-Salvail and Kishaba, 2013, in press.



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