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# CHRONIC DISEASE

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## ASTHMA

Asthma is one of the most common chronic diseases among Hawaii's children, causing attacks of wheezing, breathlessness, chest tightness, and coughing. Approximately 16.0 percent of Hawaii children and 9.2 percent of Hawaii adults currently have asthma.<sup>1</sup> Asthma symptoms are often triggered by exposure to inhaled allergens and irritants (e.g., dust, pollen, mold, rodent droppings, tobacco smoke, pollution, vog, animal dander), respiratory infections, certain medicines, or by exertion and stress. Asthma attacks may also require hospitalization, resulting in increased medical costs and missed school or work. Each year, asthma-related emergencies cost Hawaii's economy approximately \$10.5 million in emergency department (ED) visits and more than \$24 million in hospitalizations.<sup>2</sup>

### INDICATORS

**Reduce the rate of hospitalizations for asthma among young children (<5 years)**

State	Year	Per 10,000
Baseline <sup>3</sup>	2019	7.7
Target	2030	6.9

### RELATED OBJECTIVE



Healthy People 2030

**Reduce the rate of hospitalizations for asthma among children and adults ages (5-64 years)**

State	Year	Per 10,000
Baseline <sup>3</sup>	2019	2.7
Target	2030	2.4



Healthy People 2030

**Reduce the rate of hospitalizations for asthma among adults (65+ years)**

State	Year	Per 10,000
Baseline <sup>3</sup>	2019	5.4
Target	2030	4.8



Healthy People 2030

## STRATEGIES<sup>3,4</sup>

- ❖ Promote chronic disease self-management programs and enhance educational resources to empower patients, caregivers, and communities to help those with asthma become more effective at managing their condition.
  - Support development and implementation of asthma-friendly schools.
  - Encourage parents and families to prepare an Asthma Action Plan in conjunction with their child's pediatrician. Further, ensure the Asthma Action Plan is shared with their child's school and caregivers.
  - Empower children to understand their Asthma Action Plan and manage their condition once developmentally ready.
  - Provide tools, training, and information, including lay educator training, group education, and tobacco cessation services.
  - Engage patients, caregivers, schools, housing, and other community partners to plan and implement prevention policies and sustain reach of evidence-based asthma control services.
- ❖ Improve access and quality of asthma healthcare delivery.
  - Implement quality improvement processes in health care systems.
  - Promote use of team-based care to improve coordination and use of culturally-appropriate asthma care.
  - Enhance patient linkages to guidelines-based asthma care.
  - Promote coverage/reimbursement for comprehensive asthma control services.
- ❖ Implement policies and initiatives that promote healthy environments, improve indoor/outdoor air quality, and expand access to safe and healthy housing and worksites.

## CANCER

Each year, more than 7,000 Hawaii residents are diagnosed with cancer and more than 2,000 die from the disease.<sup>1,5,6</sup> While Hawaii’s citizens boast the longest life span of any state in the nation, the number of those impacted by cancer will grow as our population ages in the years ahead. Cancer can be caused by external (chemicals, radiation, viruses), internal (hormones, immune conditions, genetics), and lifestyle (tobacco, alcohol use, unprotected sun exposure, poor nutrition, physical inactivity) factors. In Hawaii, the five most common cancers diagnosed among men are prostate, lung, colorectal, melanoma, and bladder. Among women, the most common cancers are breast, lung, colorectal, uterine, and thyroid.<sup>5</sup> Significant disparities exist as well. Cancer-related health care spending in our state reaches upward of \$500 million annually.<sup>6</sup>

### INDICATORS

**Increase the proportion of adults (50-75 years) receiving colorectal cancer screenings**

State	Year	Percentage
Baseline <sup>1</sup>	2020	77.1%
Target	2030	84.8%



### RELATED OBJECTIVE

Healthy People 2030

**Increase the proportion of women (21-65 years) receiving a cervical cancer screening**

State	Year	Percentage
Baseline <sup>1</sup>	2020	80.2%
Target	2030	84.3%



Healthy People 2030

**Increase the proportion of women (50-74 years) receiving a breast cancer screening**

State	Year	Percentage
Baseline <sup>1</sup>	2022	78.5%
Target	2030	80.5%



Healthy People 2030

## INDICATORS

### Reduce the overall death rate from cancer

State	Year	Per 100,000
Baseline <sup>7</sup>	2022	118.2
Target	2030	107.5

## RELATED OBJECTIVE



Healthy People 2030

## STRATEGIES<sup>5</sup>

- ❖ Promote screening and early detection according to the U.S. Preventive Services Task Force recommendations.
- ❖ Establish policy, systems, and environmental changes for the prevention and early detection of cancer, timely and affordable cancer care, and support for survivors and their families.
- ❖ Increase public and professional awareness about cancer-related health inequities. Engage and provide outreach and education to minority populations on cancer risk, community screening services, and other resources to overcome barriers to screening and follow-up.
- ❖ Increase immunization coverage for vaccine-preventable cancers such as those caused by the Human Papillomavirus (HPV) and Hepatitis B Virus (HBV) through coordination with community and health system providers to enhance health services and public education.

## DIABETES

Diabetes is one of the most serious, common, and costly diseases in Hawaii and across the United States. In 2022, 134,000 (11.7%) adults in Hawaii said they were diagnosed with diabetes. An additional 171,400 (15.0%) adults were diagnosed with prediabetes, which puts them at high risk of developing diabetes in the future.<sup>1</sup> Diabetes is the leading cause of end-stage renal disease, non-traumatic lower-extremity amputation, and blindness among adults in the U.S. and is the seventh leading cause of death in Hawaii.<sup>8,9</sup> Adults with diabetes were twice as likely to have a heart disease or a stroke.<sup>10</sup> In addition to the human costs, the estimated total economic burden of diabetes is extraordinary, with direct medical expenditures totaling \$307 billion and indirect costs of \$106 billion in 2022.<sup>11</sup> Early detection and treatment, ongoing self-management, and improved delivery of care are critical to preventing and reducing the burden of this disease.

### INDICATORS

### RELATED OBJECTIVE

**Increase the proportion of adults (40-70 years) in Hawaii without diabetes who received a blood sugar test in the last three years**

State	Year	Percentage
Baseline <sup>1</sup>	2020	61.4%
Target	2030	67.5%

**Increase the proportion of people with diabetes who get formal diabetes education or have a diabetes management plan**



Healthy People 2030

State	Year	Percentage
Baseline <sup>1</sup>	2019	62.9%
Target	2030	69.8%

**Reduce the proportion of adults (18+ years) in Hawaii with uncontrolled diabetes (hemoglobin A1c level, or HbA1c, greater than 9%)**



Healthy People 2030

State	Year	Percentage
Baseline <sup>12</sup>	2020	38.5%
Target	2030	11.6%

## INDICATORS

### Reduce the rate of new diabetes cases (per 100,000)

State	Year	Per 100,000
Baseline <sup>11</sup>	2018	10.1
Target	2030	4.8

## RELATED OBJECTIVE



Healthy People 2030

## STRATEGIES<sup>8,13</sup>

- ❖ Improve access and quality of pre-diabetes healthcare delivery.
  - Implement quality improvement processes in health care systems for diabetes and prediabetes screening and early detection of diabetic complications.
  - Increase communication and cooperation between diabetes education and prevention programs to share best practices and resources and collaborate on adapting educational materials.
- ❖ Increase access for and enrollment of priority populations in diabetes education and prevention programs by increasing program capacity, promoting public awareness, and disseminating culturally and linguistically appropriate materials.
- ❖ Improve community-clinical linkages to support diabetes and prediabetes prevention efforts by increasing program capacity, promoting public awareness, and disseminating culturally and linguistically appropriate materials.

## HEART DISEASE & STROKE

Cardiovascular disease (CVD) is the leading cause of death and serious long-term disability in Hawaii. The two most common and deadly forms of CVD include coronary heart disease (CHD) and stroke, which account for the first and third leading causes of death, respectively. In 2022, 39,100 (3.4%) Hawaii adults were diagnosed with CHD, and 32,500 (2.8%) had a stroke.<sup>1</sup> Distinct socioeconomic, geographic, and ethnic health disparities also exist. CVD risk may be lowered through lifestyle changes including eating a heart-healthy diet, limiting alcohol, avoiding smoking and vaping, controlling one’s weight, staying physically active, and controlling one’s blood pressure and cholesterol levels. The burden on America’s health care system to treat CVD is significant, costing \$555 billion in 2016 and expected to increase to \$1.1 trillion by 2035, including direct and indirect costs.<sup>14</sup>

### INDICATORS

**Increase the proportion of adults (18+ years) with hypertension who have their blood pressure under control (<140/90 mm Hg)**

State	Year	Percentage
Baseline	2020	58.4%
Target	2030	61.3%

Source: [Uniform Data System](#)

### RELATED OBJECTIVE



Healthy People 2030

**Reduce the death rate for coronary heart disease**

State	Year	Per 100,000
Baseline	2020	59.4
Target	2030	56.4

Source: [Hawaii State Department of Health, Vital Statistics](#)



Healthy People 2030

**Reduce the death rate for stroke**

State	Year	Per 100,000
Baseline	2020	37.1
Target	2030	33.4

Source: [Hawaii State Department of Health, Vital Statistics](#)



Healthy People 2030

## STRATEGIES<sup>10,13</sup>

- ❖ Improve access and quality of CVD healthcare delivery.
  - Implement quality improvement processes in health care systems associated with CVD diagnosis, management, and treatment.
  - Increase institutionalization and monitoring of standardized CVD quality measures at the provider and system level.
  - Promote use of team-based care in provision of medication/hypertension management for adults with high blood pressure by engaging non-physician team members (e.g., nurses, pharmacists, community health workers).
  - Implement systems to identify patients with undiagnosed hypertension.
  - Increase the use of self-measured blood pressure monitoring tied with clinical supports.
- ❖ Improve community-clinical linkages to support CVD prevention efforts.
  - Coordinate efforts with physician networks, providers, and other partners to build capacity and coverage/reimbursement for lifestyle change programs.
  - Promote use of self-monitoring blood pressure management practices and other evidence-based interventions for CVD within health systems.



## References

- <sup>1</sup> [Behavioral Risk Factor Surveillance System \(BRFSS\)](#)
- <sup>2</sup> [Asthma a growing issue in Hawaii, doctors say, 2012](#)
- <sup>3</sup> [Hawaii Health Matters – Asthma Tracker](#)
- <sup>4</sup> [Hawaii Asthma Plan 2030](#)
- <sup>5</sup> [Hawaii Cancer Plan, 2030](#)
- <sup>6</sup> [Hawaii State Department of Health, CDPHPD – Cancer Program](#)
- <sup>7</sup> [Hawaii State Department of Health, Vital Statistics](#)
- <sup>8</sup> Centers for Disease Control and Prevention. What is Diabetes? Updated September 5, 2023. Accessed February 21, 2024. ([What is diabetes? | CDC](#))
- <sup>9</sup> Hawaii State Department of Health, Hawaii Health Data Warehouse. Leading Causes of Death: State of Hawaii, 2018-2022. Last reviewed: December 1, 2023. Accessed March 15, 2024. ([LCD-State-Report-2020\\_2022.pdf \(hhdw.org\)](#))
- <sup>10</sup> Centers for Disease Control and Prevention (CDC). Nutritional Health and Nutrition Examination Survey (NHANES). Accessed on May 21, 2024 ([Reduce the proportion of adults with diabetes who have an A1c value above 9 percent — D03 - Healthy People 2030 | health.gov](#))
- <sup>11</sup> CDC Diabetes Data & Statistics. Accessed May 21, 2024. ([Hawaii Health Matters :: Indicators :: Adults with New Cases of Diabetes :: State : Hawaii](#))
- <sup>12</sup> Uniform Data System (UDS)
- <sup>13</sup> [Hawaii Coordinated Chronic Disease Framework, 2014-2020](#)<http://health.hawaii.gov/chronic-disease/files/2014/09/CDFrameworkLR.pdf>
- <sup>14</sup> [Hawaii Heart Disease and Stroke Plan 2030](#)