

# **Oregon Health Improvement Plan**

*Improving the health of all Oregonians  
where they live, work, learn and play*

December 2010

A report of the  
Oregon Health Improvement Plan Committee

Oregon Health Policy Board  
Oregon Health Authority

---

**Table of Contents**

Letter from the Committee Chairs..... page 3

Executive Summary..... 4

Background, Community Engagement, and Areas of Focus..... 5

Goals, Strategies and Actions ..... 10

    Goal I: Achieve health equity and population health by improving social,  
        economic and environmental factors ..... 11

    Goal II: Prevent chronic diseases by reducing obesity prevalence, tobacco use and  
        alcohol abuse ..... 13

    Goal III: Stimulate linkages, innovation and integration among public health, health  
        systems and communities ..... 18

Recommended Actions Referred to Other OHA Committees ..... 21

Next Steps ..... 24

Appendices

    Acronyms ..... 25

    Committee Membership..... 26

    Guiding Principles ..... 28

    Population Health Definition ..... 29

    Population Health Measures ..... 30

    Tables of Baseline Data ..... 31

    Data Sources for Baseline Data..... 43

    Metrics Definitions..... 46

    Outcomes and Effectiveness Table ..... 53

    Cost Analysis Table..... 67

    Goal Area Timelines ..... 70

    Oregon Health Improvement Plan Committee Charter – January 2010 ..... 73

    Select Committee Resources ..... 77

# **FINAL** Oregon Health Improvement Plan: 2011 - 2020

---

October 20, 2010

Dear Oregon Resident,

In the coming months, you will be hearing a lot about the Oregon Health Improvement Plan. With all of the health care reform that is currently taking place across the nation, you may be wondering what this Plan is. First let me tell you what it is not. This is not a plan to eliminate or control the care you receive from your doctor. It is not a plan focused on health insurance or prescription drugs.

The Oregon Health Improvement Plan is a series of recommendations to improve the lifelong health of Oregonians, prevent chronic disease, and stimulate innovation and collaboration within our communities. Its focus is on finding ways to ensure people's health long before health *care* is needed. Its goal is to create environments and systems that provide every Oregonian, regardless of their income, education, or racial/ethnic background, with the opportunity to make healthy choices for themselves and their families.

What does this Plan mean for you? It means that over the next 10 years, you'll find more early childhood education opportunities, such as Head Start and pre-kindergarten, and you'll see more restaurants and vending machines offering foods that meet national nutrition standards. It means play time will be a part of every school day, and walking, bicycling or riding the bus to work or school will be more convenient. It means that wherever you go, you won't breathe secondhand smoke. It means the cost of your medical care won't continue to grow.

These aren't pie-in-the-sky goals. They are all achievable, but we need your help. Think about how you would draw the ideal community in which people are able to eat better, move more and breathe clean air. Think about how you design sidewalks, transit systems, bike paths, schools, restaurants, parks and workplaces, not just about the availability of health clinics. Then get involved. For more information, please visit our website to stay informed of HIP progress and activities (<http://www.oregon.gov/DHS/ph/hpcdp/hip/index.shtml>).

Every Oregonian can be a leader of the health of their community. Our legacy demands it.

Sincerely,

Tammy Bray, Chair  
Oregon HIP Committee

Lila Wickham, Vice Chair  
Oregon HIP Committee



## Executive Summary

In recent years there has been a major shift in the way we perceive health in our communities - Instead of waiting until we are sick to *treat* an illness, we are working together to *prevent* illness. Our old approach has been a costly endeavor: Nationally, 83 cents and 96 cents of Medicaid and Medicare dollars respectively, are spent treating chronic diseases, and hospitalization costs in Oregon for chronic diseases alone are estimated to exceed \$2.2 billion a year. To have a meaningful and lasting impact on the cost of care and the overall health of our communities we need to change our approach to create environments and systems that support both the prevention and management of illness.

To help address these issues, the Oregon Health Policy Board created the Oregon Health Improvement Plan (HIP) Committee in January 2010 with the charge of recommending innovative solutions to improve the lifelong health of all Oregonians; increase the quality, reliability and availability of care; and lower or contain the cost of care so it is affordable to everyone. To achieve these objectives, it is essential that we address more than the provision of care. We must also address the social factors that impact the places we live, play, learn and work, and we need to create innovations and new collaborations within our current systems. The Oregon Health Improvement Plan is organized into three goals with corresponding outcomes and strategies that are based on extensive research and community input.

1. **Achieve health equity and population health by improving social, economic and environmental factors.** **Outcome:** Increase high school graduation rates and college degrees for all Oregon students, with particular attention to students experiencing disparities. **Strategy:** Target resources to improve child and student health (birth through higher education) to support improved education outcomes.
2. **Prevent chronic diseases by reducing obesity prevalence, tobacco use and alcohol abuse.** **Obesity Outcome:** Reduce obesity in children and adults. **Strategy:** Make healthful food and beverage options widely available, increase physical activity opportunities, and provide evidence-based weight management support. **Tobacco Outcome:** Reduce tobacco use and exposure. **Strategy:** Create tobacco-free environments, prevent initiation of tobacco use, support cessation, and counter pro-tobacco influences. **Alcohol Outcome:** Reduce alcohol abuse. **Strategy:** Reduce alcohol abuse by adults and alcohol use in youth.
3. **Stimulate linkages, innovation and integration among public health, health systems and communities.** **Outcome:** Implementation of integrated and coordinated community-based initiatives to reduce chronic diseases and improve population health. **Strategy 1:** Increase the effectiveness and efficiency of Oregon's public health system. **Strategy 2:** Establish and fund systemic integration between patient-centered medical care homes and community-based public health and social services resources to support chronic disease prevention and management.

The completion of the Oregon Health Improvement Plan is just the beginning. A path forward has been identified, but it will take the efforts of every Oregonian to put the plan into practice. In the coming years, the HIP Committee will be working with state and local public health agencies, education and transportation agencies, health care systems and Oregon residents to tailor the strategies and actions within the Plan to the needs of individual communities, and then put them into practice. As progress is made, the Committee will also work with appropriate agencies to collect data to ensure our ability to measure the impact of this important work on Oregon's diverse populations.

**Background, Community Engagement, and Areas of Focus**

**Background**

The Oregon Health Policy Board (OHPB) and the Oregon Health Authority (OHA) were recently created through the passage of House Bill 2009. The OHPB is a nine-member citizen Board that serves as the policy-making and oversight body for the Oregon Health Authority, a new state agency that will encompass all of the health related programs in the state. The OHPB has a triple aim: 1) Improve the lifelong health of all Oregonians; 2) Increase the quality, reliability and availability of care for all Oregonians; and 3) Lower or contain the cost of care so it is affordable to everyone.

In January 2010, the Oregon Health Policy Board (OHPB) created the Health Improvement Plan (HIP) Committee, a group consisting of twenty-six members who represent schools, government agencies, tribes, businesses, and communities throughout the state. The Committee was charged with developing an overarching plan with short- and long-term actions to improve the health of all Oregonians. The Committee was chartered to create a plan using evidence-based interventions that incorporate policy, systems, and environmental approaches to promote the overall health of Oregonians across the state; and emphasize coordination among health care delivery systems, public health, community-based organizations, and individual communities.

The HIP Committee utilized a set of guiding principles to direct its work throughout the development of the Plan. These principles called for a focus on: 1) prevention; 2) evidence and data; 3) health equity; 4) addressing social, economic and environmental factors; 5) respecting cultures and traditions; 6) empowering local communities; and 7) creating short- and long-term policy actions. These principles were echoed by the community and participating stakeholders, and are reflected in the recommendations of the Plan. Additional information on the guiding principles and other key theoretical frameworks the Committee used can be found in the Appendices.

**Community Engagement Process**

The HIP Committee recognizes and values the wisdom and experiences of both individuals and organizations, and has diligently worked to ensure that this critical information is included in its recommendations and built upon previous community engagement. In addition to reviewing numerous statewide plans and reports, national guidelines, and evidence-based and best/promising practices, the HIP Committee conducted an extensive community engagement process to inform the Health Improvement Plan. To gain local and regional perspectives, the Committee hosted a series of community listening sessions in Pendleton, Medford, Hillsboro, Portland, Bend, Madras, Prineville, Grand Ronde, and at the Health Commission of the Confederated Tribes of Umatilla, between the months of April and August, 2010. The Committee also conducted a web-based Community Input Survey in June 2010. In both the sessions and the survey, participants were asked the following questions:

1. What are the issues in your community that have the greatest impact on your health and that of others in the community?

2. What is happening in your community that promotes health and supports a thriving community?
3. What 3-5 changes in policy would make your community healthier and thrive?

An analysis of the data showed that Oregonians believe core issues such as poverty and education, and chronic conditions including diabetes and addiction, have the greatest impact on the health of their communities. These findings, which are also supported by local and national research, have been woven into all of the components of the plan. However, the community engagement process does not end here. Over the next several years, the Health Improvement Plan Committee will be working with state and local public health agencies, education and transportation agencies, businesses and worksites, health care systems, behavioral health, long-term care, community- and faith-based organizations, and Oregon residents to tailor the strategies and actions within the Plan to the needs of individual communities, and then put them into practice.

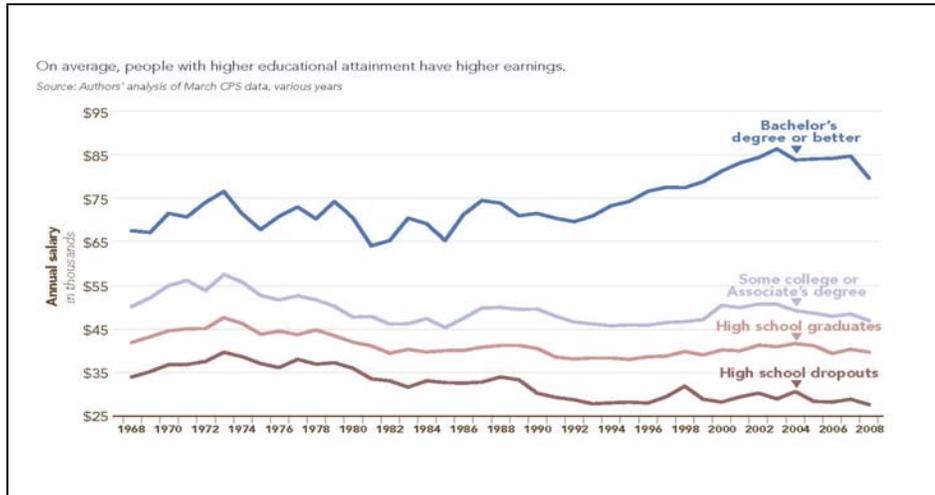
### **Identified Areas of Focus**

The Health Improvement Plan is organized into three areas of focus: Achieving Health Equity and Population Health; Preventing Chronic Disease; and Stimulating Innovation and Integration. Each area has corresponding goals, outcomes, strategies, and actions which are laid out in the Plan. The following narrative provides a brief description of each area of focus.

**I. Achieving Health Equity and Population Health** – Our health is determined by much more than individual behavior, health care, or genetics. Though we don't usually associate social factors with health, the places we live, play, learn and work have huge impacts on our health and are shaped by economics, social policies and politics. Efforts to get people to eat right, exercise more, and stop smoking can only go so far without addressing the significant health disparities and health inequities seen in the U.S. Health *disparities* are differences between population groups with regard to disease and health outcomes, or access to care<sup>1</sup>. These disparities may be the result of health *inequities*, differences that result from social factors such as economic forces, educational quality, environmental conditions, race/ethnicity, individual health behavior choices, mental health and addictions, and access to physical and behavioral health care. As the name suggests, health inequities are unfair; they are also reversible<sup>2</sup>. Policies and decisions about education, employment, housing, transportation, land use, economic development, and public safety can either mitigate or widen health disparities and inequities. To effectively address health equity and population health, both health expertise and community wisdom must be a part of all policy and programmatic decisions in Oregon.

After reviewing the research and considering the input from Oregonians throughout the state, the need to focus on education initiatives was clear. Research has shown that the link between education and health and health behaviors is strong, though complex. Educational attainment is negatively impacted by the effects of poor health in childhood, race ethnicity and lower income levels. Improved educational achievement positively impacts future income levels and social networks, and contributes to the understanding and practice of good health behaviors. No other single factor will improve health more, for all of Oregon's many populations, than increased educational attainment and the employment and

income benefits it creates. Special attention should be paid to systematically closing the achievement gap that exists between students of different race/ethnicity.



Source: The Georgetown University Center on Education and the Workforce, *Help Wanted: Projections of Jobs and Education Requirements Through 2018*, June 2010

The Health Improvement Plan proposes several activities to create explicit linkages between the health of young people and education in order to increase the educational attainment by Oregon's youth. For example, Oregon's public health system and community-based organizations can partner with the state Department of Education and local school districts to ensure students are healthy, physically, mentally and emotionally, and able to achieve their fullest potential; early childhood education programs can be strengthened and expanded; and schools can be utilized as community meetings spaces to promote community engagement and support healthy lifestyles. Throughout this process, improved ability to collect and analyze current data to monitor and evaluate health, social, economic and environmental factors among Oregon's diverse populations will be critical.

**II. Preventing Chronic Diseases** – Medical care will always be a part of health. However, to improve the overall health of Oregonians and ensure the availability of affordable, high-quality medical care we must increase our focus on preventing chronic disease; with targeted efforts to reduce the disproportionate burden of chronic disease evidenced by race/ethnicity and income. The cost of treating chronic diseases is staggering. Nationally, 83 cents and 96 cents of Medicaid and Medicare dollars, respectively, are spent treating chronic diseases<sup>3</sup>, and hospitalization costs in Oregon for chronic diseases alone are estimated to exceed \$2.22 billion a year<sup>4</sup>. Almost half of Oregon adults (45%) have at least one chronic disease<sup>5</sup>, and in 2007, chronic diseases caused more than 60 percent of the deaths in Oregon<sup>6</sup>.

Obesity, tobacco, and alcohol abuse are responsible for 50 percent of the chronic disease deaths in Oregon each year<sup>7</sup>. An analysis of data from the 2009 Behavioral Risk Factor Surveillance System and the Oregon Healthy Teen Survey produced the following results. Since 1990, obesity in Oregon adults has increased 121 percent, and between 2001 and 2009, obesity jumped 54 percent among middle and high school students. Though comprehensive strategies have significantly reduced tobacco use in Oregon, the 2009 data reports that 17.5% of adults and 9.9% of 8<sup>th</sup> graders and 14.9% of 11<sup>th</sup> graders continue to

smoke. Alcohol abuse, defined as having had more than one drink per day for women, or more than two drinks per day for men, has been identified in approximately 6% of Oregon adults, and has significant impacts on individual health, the health and well-being of families, and broader social and economic issues including public safety and worker productivity. Today, the number of Oregon 8<sup>th</sup> graders who have had a drink in the past 30 days is twice the national average. Addressing these three risk factors is the most promising strategy for improving population health and lowering future chronic disease costs.

The Health Improvement Plan makes several recommendations to address the high rates of obesity, and tobacco and alcohol use in Oregon. Creating environments that are tobacco free and provide access to healthy, affordable, culturally appropriate choices for foods and beverages, and safe places for daily physical activity will have the highest impact in preventing these chronic diseases and preventing further complications. Though strategies and actions have been identified for each issue, it is critical that we look at the prevention of these chronic disease risk factors as a single initiative to create environments where making healthy choices is common, affordable, safe and accessible for all Oregonians regardless of income, ethnicity, ability or geographic location.

**III. Stimulating Innovation and Integration** – The health issues described throughout this document are complex issues with numerous contributing factors that no single person or agency can adequately address alone. The community response needs to include the expertise and active participation of numerous stakeholders paying particular attention to inclusivity of racial and ethnic communities, individual community members, community and faith-based organizations, and governmental agencies. As part of this collaboration, public health agencies can play a key leadership role in supporting the development of local solutions by assessing conditions at the community level, assuring data is available to analyze and prioritize actions, coordinating system integration efforts, and developing local health improvement plans. To be effective, all stakeholders must be involved in the creation of new collaborations, ideas, and ways of doing things.

Many of the ideas and solutions that will arise from this new collaborative approach will take several years to implement. However, the HIP Committee has identified several areas for immediate action within the Plan. These include developing mechanisms to collect accurate population health and risk factor data by race, ethnicity and economic status and link it to clinical, emergency, and hospital data at the community and state levels; strengthening the ability to link public health with the health care delivery system; and providing opportunities for collaboration among multiple stakeholders.

<sup>1</sup> Department of Health and Human Services (US). *Healthy People 2010: Understanding and Improving Health*. 2<sup>nd</sup> ed. Washington: DHHS; 2000 Nov.

<sup>2</sup> Baker, Metzler, Galea. 2006. Addressing Social Determinants of Health Inequities: Learning from Doing. *American Journal of Public Health*, 95(4), 553-555.

<sup>3</sup> Chronic Conditions: Making the Case for Ongoing Care, September 2004 Update. Robert Wood Johnson Foundation. <http://www.rwjf.org/files/research/Chronic%20Conditions%20Chartbook%209-2004.ppt>

<sup>4</sup> Keeping Oregonians Healthy, Oregon Department of Human Services, 2007. (*adjusted for inflation*). In this publication, chronic diseases include arthritis, asthma, cancer, diabetes, heart disease and stroke, and obesity.

<sup>5</sup> 2009 Oregon Behavioral Risk Factor Surveillance System.

<sup>6</sup> Oregon Department of Human Services analysis of 2007 Death Certificate data.

<sup>7</sup> Oregon Department of Human Services analysis of 2003 Death Certificate data.

---

## Goals, Strategies, Actions

The Oregon Health Improvement Plan consists of a series of recommendations to improve the lifelong health of all Oregonians regardless of background or geographic location; increase the quality, reliability and availability of care; and lower or contain the cost of care so it is affordable to everyone. The Plan is based on extensive research and community engagement and uses evidence-based interventions that incorporate policy, systems, and environmental approaches and emphasizes coordination among health care delivery systems, public health, community-based organizations, and individual communities.

The Health Improvement Plan is organized under three distinct goals:

1. Achieve health equity and population health by improving social, economic and environmental factors;
2. Prevent chronic diseases by reducing obesity prevalence, tobacco use and alcohol abuse; and
3. Stimulate linkages, innovation and integration among public health, health systems and communities.

Each goal has at least one corresponding outcome that includes specific strategies, actions, evaluation metrics, and return on investment information. Actions are broken out into three distinct time categories, 2011 Actions, 2012-2014 Actions, and 2015-2020 Actions. Additional information, including definitions and supporting data, can be found in the Appendices. As the Oregon Health Authority moves forward, work to operationalize Health Improvement Plan recommendations will be ongoing.

**Goal I: Achieve health equity and population health by improving social, economic and environmental factors.**

**Outcome:** Increase high school graduation rates and college degrees for all Oregon students, with particular attention to students experiencing disparities

**Strategy:** Target resources to improve child and student health (birth through higher education) to support improved educational outcomes.

2011 Actions:

- Support maintenance of current funding for access and participation in early childhood education such as Oregon Prekindergarten, Early Head Start and Migrant Head Start.
- Support passage of legislation that requires districts and schools to assess and address physical, social, and environmental health barriers that impede learning. Principles of such legislation should include:
  - Inclusion of specific student health measures and routine reporting on these measures (e.g., Oregon School Report Card);
  - Creating a mechanism for the provision of training and technical assistance to support school districts in developing and implementing plans;
  - Ensuring that all actions are based on student health data and are connected to measurable outcomes; and
  - Employing best available evidence including emerging practices to inform policies and programs.
- Support partnerships among state and local public health agencies, community-based organizations, Oregon Department of Education, and local school districts to support health improvement of students and staff.
- Inventory, expand and improve K-12/college programs aimed at diversifying the health and health care workforce.

2012-2014 Actions:

- Support expanded funding for access and participation in early childhood education such as Oregon Prekindergarten, Early Head Start and Migrant Head Start.
- Support organizations with expertise in educational systems, such as the Oregon Department of Education, schools districts, Chalkboard Project, in implementing strategies to improve educational attainment among all Oregon children regardless of income, ethnicity or geographic location, with particular attention paid to populations experiencing educational disparities.
- Support Health Impact Assessments and plans to remediate identified health impacts for building and transportation projects in geographic proximity to school sites.

## ***FINAL*** Oregon Health Improvement Plan: 2011 - 2020

---

- Improve early intervention through prompt access to mental health services so that school and transition age youth receive help at the onset of mental illness to help achieve overall health as well as educational and vocational attainment.

### 2015-2020 Actions:

- Promote stable housing by prioritizing existing resources to build new, affordable housing and preserve and rehabilitate existing affordable housing to accommodate families who are at risk because they spend more than 30% of their income on housing, including an emphasis on culturally-specific housing programs and cultural centers.

Metrics: Participation in early childhood education, high school graduation rates, post-secondary degrees

Return on Investment: Nothing will improve health for all of Oregon's various populations more than being well-educated and employed. Less education predicts higher levels of health risks, such as obesity, tobacco and alcohol use, and violence. At the same time, good health is associated with academic success. Health risks such as teenage pregnancy, poor dietary choices, inadequate physical activity, physical and emotional abuse, substance abuse, and gang involvement have a significant impact on how well students perform in school.

Educational attainment is directly related to future income of individuals and of the State. In Oregon, on average working-age people who did not complete high school earn \$10,000 less each year than those who graduate from high school. The personal implications of this type of wage disparity are many. The implications to the state are also significant. Approximately \$173 million dollars in tax revenue is lost each year due to the decreased earnings of individuals that did not earn a high school diploma.

There are additional costs incurred to provide social and medical services to Oregonians that do not complete high school. Those who did not complete high school and are over the age of 24 are reported to be in worse health than adults that completed high school. As a result of this health disparity, costs for state supported social and medical programs are higher for this population. For example, Oregon spends more than \$200 million providing Medicaid services to people who did not graduate from high school.

**Goal II: Prevent chronic diseases by reducing Obesity prevalence, Tobacco use, and Alcohol abuse.**

**Obesity Outcome:** Reduce obesity in children and adults especially in populations experiencing disparities

**Strategy:** Make healthful food and beverage options widely available, increase physical activity opportunities, and provide evidence-based weight management support.

2011 Actions:

- Support legislative efforts to fund the Farm to School and School Gardens and Nutrition Programs through State Lottery funds.
- Adopt and implement nutrition standards for foods and beverages sold in cafeterias, stores and vending machines in state agencies, schools, universities, including eliminating the sale of sugar-sweetened beverages.
- Make an evidence-based weight management health insurance benefit (e.g. Weight Watchers) available to DMAP managed care and fee-for-service clients, as well as to PEBB and OEBC members and promote its use at workplaces.
- Reduce consumption of sugar-sweetened beverages by raising the price through a \$0.005 per ounce excise tax in 2011-2013 (increasing to \$0.01 per ounce in 2013). Dedicate a portion of the proceeds to reach recommended funding (\$22 million 2011-13) for comprehensive and effective efforts to reduce obesity and chronic diseases in adults and children, especially in populations experiencing disparities, including media campaigns and implementation of best and promising practice interventions by counties, regions, tribes, schools, coalitions and community-based organizations.
- Promote and support physical activity throughout the work and school day for employees and students including accessible stairs, breaks for stretching, walking meetings, recess, physical education and after school play time.
- Assure public and private workplace policies provide support for breastfeeding mothers returning to work be consistent with Oregon's wage and hour law requiring a private space and time for nursing mothers to express milk.
- Support legislation to propose an Oregon constitution change to expand the Oregon Highway Trust Fund to allow for use of funds for active transportation projects outside of the road right of way. Funds could be used to support public transit, inter-city rail, and bicycle and pedestrian projects.

2012-2014 Actions:

- Expand the adoption of nutrition standards and elimination of the sale of sugar-sweetened beverages to additional settings including county and city agencies, community colleges, tribal

agencies, health care facilities, childcare settings, community based organizations, worksites, correctional facilities.

- Expand availability of an evidence-based weight management health insurance benefit through other public and private agencies and organizations.
- Promote and support active transportation options for employees and students including mass transit, bicycling and walking.
- Begin steps to reduce the sodium intake of Oregonians by decreasing sodium in packaged and restaurant foods produced in Oregon by 25% over five years through voluntary strategies.

### 2015-2020 Actions:

- Supplement the current federal food stamp program (SNAP) with state funds and provide incentives for purchasing healthful foods with state-funded program.
- Fund a Healthy Food Financing Initiative similar to the successful Pennsylvania program that funds development of grocery stores and corner “healthy food” markets in low-income neighborhoods/“food deserts”, and create a culturally-specific food and economic development plan that partners with community business owners to provide culturally-specific healthy foods.

Metrics: BMI, sugar-sweetened beverage consumption, meet CDC physical activity recommendations

Return on Investment (ROI): One-third of the recent increase in medical costs in Oregon is attributed to obesity. In 2003, estimated medical costs related to obesity in Oregon among adults were \$781 million. Costs in Oregon for treating diabetes are \$1.4 billion/year. CDC estimates that persons who are obese have medical costs that are \$1,429 higher than those of normal weight. By reducing obesity and obesity-related chronic diseases like diabetes, Oregon stands to realize a significant return on investment.

Public health programs have been successful at reducing the prevalence of tobacco use by adults in Oregon by 22% in 10 years. A fully funded obesity prevention program that achieved similar success in preventing diabetes would save at least \$215 million a year in medical costs by 2020. Savings from diabetes reduction alone from 2011-2020 would total \$1.18 billion, a return on investment of over 6:1. Savings relating to diabetes are just one component of the total benefit from reducing obesity rates, so this estimate is conservative.

The benefits of establishing health-promoting environments go far beyond reducing the prevalence of obesity and diabetes. Such environments also support treatment and management of diabetes and help reduce its dire complications such as heart disease, blindness, amputations and kidney disease. Likewise, prevention and management of other chronic diseases like hypertension, heart disease, strokes, cancer and arthritis would improve and provide additional savings in health care cost.

Sugar-sweetened beverages are empty calories, a major contributor to the increase in obesity in children and adults. Oregonians consume over 136 million gallons of sugar-sweetened soda each year, equivalent to more than 63 million pounds of excess weight gained in the state. This figure does not include other beverages such as energy drinks and sugar-sweetened fruit drinks. Price increases are being shown to reduce consumption of sugar-sweetened beverages. Raising the price of sugar-sweetened beverages by 10% through taxation is projected to decrease consumption by over 12%. Because sugar-sweetened beverages are one of the main drivers of weight gain in America, taxing these products is an appropriate means for reducing their consumption and funding comprehensive efforts to reduce obesity and related chronic diseases like diabetes.

Focusing prevention efforts and providing weight management benefits for the 850,000 OHA covered lives (DMAP, PEBB, and OEBC) will enable significant savings to accrue directly to the state budget. PEBB estimates more than \$2 million savings in health care costs from a \$1.4 million investment in 2009.

**Tobacco Outcome:** Reduce tobacco use and exposure especially in populations experiencing disparities

**Strategy:** Create tobacco-free environments, prevent initiation of tobacco use, support cessation, and counter pro-tobacco influences.

**2011 Actions:**

- Adopt and implement tobacco-free campus policies in state agencies, addictions and mental health facilities contracting with OHA, and hospitals.
- Adopt and implement smoke-free policies for all public multiunit-housing settings in partnership with public housing authorities and community development corporations.
- Prevent initiation and reduce consumption of tobacco by raising the price of cigarettes by a \$1/pack excise tax (and a proportionate amount on other tobacco products), and dedicate 10% (\$40 million) to comprehensive and effective efforts at the state and local level to reduce tobacco use and exposure in adults and children, especially in populations experiencing disparities, including implementation of best and emerging practice interventions by counties, regions, tribes, schools, coalitions and community-based organizations.
- Assure that evidence-based tobacco cessation health insurance benefits are available and promoted to DMAP managed care and fee-for-service clients, as well as to PEBB and OEBC members.

**2012-2014 Actions:**

- Expand implementation of tobacco-free campus policies to additional settings including county and city agencies, community colleges, universities, medical clinics, childcare settings, tribal agencies, private sector worksites, multi-tenant office properties, and community-based organizations.

## ***FINAL*** Oregon Health Improvement Plan: 2011 - 2020

---

- Continue to increase the price of tobacco through excise tax and dedicate a portion of the proceeds to expand comprehensive efforts to reduce tobacco use and exposure in adults and children, until the CDC recommended level of funding for tobacco control in Oregon is reached (\$43 million/year).
- Require tobacco retailers to obtain a license at the local, state, and/or tribal level before selling tobacco in order to monitor, implement, and enforce local, state, federal and tribal laws regulating tobacco sales, marketing, and promotions.
- Ban free sampling of tobacco products, tobacco coupon redemption, and other tobacco price reduction strategies.
- Require tobacco prevention messages at the point-of-sale, such as Quit Line or hard hitting graphic warnings.
- Require that tobacco education and cessation materials be given “equal time” in tobacco retail stores, such that anti-tobacco marketing materials take up the same amount of space as tobacco advertising and promotional materials including “powerwall” displays.

Metrics: Tobacco use and exposure in children, adults, pregnant women

Return on Investment (ROI): Increasing the cost of tobacco is a proven practice for preventing initiation and reducing tobacco use in youth and adults. Oregon’s current tobacco tax is below the national average, making it easier for youth to begin using tobacco and more difficult for tobacco users to quit. Oregon’s low tobacco tax rate, unchanged since 2004, also limits funds available for tobacco prevention and other important state services. Without an on-going substantial and dedicated source of funding, the relentless efforts of the tobacco industry to recruit new smokers and promote tobacco use will overcome current tobacco prevention efforts.

Tobacco use continues to be the leading cause of illness and premature death in Oregon. For each one percentage point decline in adult and youth smoking rates, Oregon can expect to see 28,400 fewer adult smokers, 460 fewer pregnant smokers, and 2,000 fewer high school smokers. This will result in a \$269.8 million reduction to future health care costs from adult smoking declines and a \$148.8 million reduction in future health costs from youth smoking declines.

Focusing prevention efforts and providing evidence-based cessation benefits for the 850,000 OHA covered lives (OHP, PEBB, and OEBC) will enable significant savings to accrue directly to the state budget. For every dollar Oregon spends on providing tobacco cessation treatments, it has an average potential return on investment of \$1.32.

Alcohol Outcome: Reduce Alcohol Abuse

Strategy: Reduce alcohol abuse by adults and alcohol use in youth especially in populations experiencing disparities

2011 Action:

- Decrease consumption of alcohol consumed in the form of beer by raising the price of beer by doubling the current excise tax from 8 cents per gallon to 16 cents in 2011-2013. Dedicate a portion of the proceeds to provide funding for comprehensive and effective efforts to reduce the health and economic burden of alcohol abuse, including implementation of media campaigns and evidence-based community alcohol abuse prevention interventions for high-risk and vulnerable populations such as youth, and communities with high prevalence of alcohol abuse.

2012-2014 Actions:

- Continue to increase the excise tax on beer bi-annually indexed to inflation and dedicate funding for comprehensive efforts to reduce the health and economic burden of alcohol abuse, including implementation of media campaigns and evidence-based community alcohol abuse prevention interventions for high-risk and vulnerable populations such as youth, and communities with high prevalence of alcohol abuse.

Metrics: Alcohol abuse

Return on Investment (ROI):

The return on this investment would be lower levels of alcohol related damage in our society, and increased funding to cover the costs of damage that does occur. The Oregon Liquor Control Commission (OLCC) reports that alcohol abuse alone cost Oregon's economy approximately \$3.2 billion in 2006. This is approximately eight times greater than the \$395.0 million in tax revenues collected in fiscal year 2006 from the sale of alcohol. A substantial return could be gained by reducing consumption, especially in youth. The actual amount in financial terms needs to be determined by an economic and health analysis assessing the unique contribution of beer and other malt beverages, estimating the potential drop in consumption given tax increase, and estimating the savings in health care and social service agencies. However, the 2010 report to the Governor has indicated that "prevention and recovery programs are very cost effective".

**Goal III: Stimulate linkages, innovation and integration among public health, health systems and communities to increase coordination and reduce duplication.**

**Outcome:** Implementation of integrated and coordinated community-based initiatives to reduce chronic diseases, improve population health and reduce health disparities

**Strategy 1:** Increase the effectiveness and efficiency of Oregon's public health system

2011 Actions:

- Coordinate funding and programs available through federal health reform that would contribute to establishing systemic integration between primary care homes, public health, mental health, and other health services (dental, vision), long-term care and social services such as public health nurse home visiting, community health workers, community health teams.
- Collaborate with local (non-profit) hospitals, local agencies, and community-based organizations to conduct community health assessments, develop local coordinated and integrated Health Improvement Plans focused on reducing obesity, tobacco use and exposure, and chronic disease prevention and management, and evaluate the results including the impact on reducing disparities and achieving health equity.
- Create regional health collaboratives that track and are responsible for local policy, health improvement planning, priority setting, system development, financial investment and health outcomes for all populations regardless of income, ethnicity, ability or geographic location.
- Ensure that state data systems to collect, manage, and analyze public health performance measures and quality improvement processes include demographic data on race, ethnicity, country of origin, language, income, education level, occupation, sexual orientation and ability, and tie them to clinical, emergency and hospital data through state and regional Health Information Exchanges (HIEs).
- Designate Health Information Technology funding to assure clinicians and admissions staff are trained on the collection of racial and ethnic data for inclusion in electronic health records by hospitals and clinics using standards developed in 2010 by Quality Corporation Task Force.

2012-2014 Actions:

- Advance the quality and performance of Oregon public health departments by the state and all county/regional health departments seeking and achieving national accreditation.
- Require that local pilot programs resulting from local Health Improvement Plans be funded to target resources for Oregon populations that are most vulnerable and have the greatest disparities due to income, race, ethnicity, and/or geographic region.

## ***FINAL*** Oregon Health Improvement Plan: 2011 - 2020

---

Strategy 2: Establish and fund systemic integration between patient-centered medical care homes and community-based public health and social services resources to support chronic disease prevention and management.

### 2011 Actions:

- Make evidence-based chronic disease self-management interventions (e.g. Living Well) widely available in communities and reimbursed by OHA for DMAP managed care and fee-for-service clients, as well as PEBB and OEBC members.
- Make evidence based group exercise and falls prevention programs (e.g. Tai Chi, Arthritis Foundation programs) widely available and affordable in all counties and all tribal communities through collaboration with county/regional health departments, Area Agencies on Aging, tribal agencies, long-term care, community-based organizations.

### 2012-2014 Actions:

- Expand upon the current pilot programs to reimburse for evidence-based home-based multi-trigger, multi-component interventions with an environmental focus for people with asthma available through targeted case management programs in all local health departments and tribal health authorities in Oregon.
- Establish pilots to develop, test, and evaluate “community health team” models that coordinate, navigate, integrate and track patient referrals and outcomes between primary care homes, other health services (dental, vision), public health, behavioral health and social services.
- Establish a mechanism to measure the savings resulting from implementing chronic disease health prevention benefits associated with the Health Improvement Plan and redirect the savings for further expansion of OHP and funding of proven prevention and intervention strategies.
- Expand statewide programs that demonstrate improved health outcomes and reduced disparities through successful coordination, navigation, integration and evaluation of patient referrals and outcomes between primary care homes, other health services (dental, vision), public health, behavioral health and social services.

Metrics: community assessments done in collaboration with local health departments and hospitals, health collaboratives established and tracking health outcomes, state/local health departments applying for accreditation, participation in evidence-based chronic disease self-management programs, hospital readmissions and preventable hospital admissions

Return on Investment: A focus on community health assessment and community health improvement plans resulting from inter-related community collaborations that include public health, mental health and addictions, hospitals and health systems, land grant university extension services, community based organizations, long-term care, education and public and private employers, will focus community

interventions on identified needs and will be embraced by the community because they are driven at the local level. The collaborations with population based public health measures and decreased hospitalization use will reduce costs and focus on primary prevention. A public health system focused on utilization of prevention and meaningful outcome measures will assure the focus on prevention and equity at the community level. The return on investment is well documented by Trust for America's Health. Healthy people spend less on medical care. Investing \$10 per person annually in community programs that increase physical activity, improve nutrition, and prevent smoking could save Oregon more than \$193 million in the next five years.

Persons living with chronic conditions who have the tools to effectively self-manage their conditions feel an increased sense of efficacy, are more able to follow-through with their health care provider's recommendations, and use fewer high-cost health care services. A recent Oregon State University report on Oregon's evidence-based Living Well program estimates the following five-year effects if only 5% (78,300) of eligible Oregonians were to participate in the program: 2,138 quality adjusted life years gained, 11,119 avoided Emergency Department visits saving \$13 million, 55,593 avoided hospital days saving \$130 million. Reimbursement by OHA of \$750,000 (\$375/participant for 2000 people) would support the expansion of Living Well workshops across the state. Potential ROI would include 280 avoided ED visits (saving \$317,000) and 1390 avoided hospital days (saving \$3.25 million).

Evidence based healthy homes programs improve overall quality of life and productivity, specifically improving asthma symptoms and reducing the number of school days missed due to asthma. The Community Guide for Preventive Services found that healthy homes programs with a combination of minor or moderate environmental remediation with an educational component provide good value for the resources invested and have benefit-cost ratios ranging from 5.3 to 14.0.

## Recommended Actions Referred to Other OHPB Committees

Many recommended actions were generated during the plan development process, by HIP Committee members, through the Community Listening Sessions and from stakeholder input. Below is the list of recommendations that have been referred to DMAP and other Oregon Health Policy Board Committees as actions determined by the committee to be important but are outside the scope of the HIP Plan.

### **HIP Committee Recommendations to OHA/DMAP**

Enroll all eligible tribal members onto the Oregon Health Plan outside of the lottery system because of 100% federal reimbursement

DMAP purchased health care benefits for managed care and fee-for-service clients should reimburse:

- evidence-based tobacco cessation that meets US Preventive Services Task Force recommendation
- evidence-based chronic disease self-management programs such as Living Well
- evidence-based weight management programs such as Weight Watchers
- lactation-related durable medical equipment and lactation specialists to provide lactation services
- evidence-based home-based multi-trigger, multi-component interventions with an environmental focus for people with asthma

### **HIP Committee Recommendations to other Oregon Health Policy Board Committees**

#### **Health Information Technology Oversight Council (HITOC)**

- Require public health participation on Health Information Exchange initiatives.
- Require county level demographic data (income, race/ethnicity, education) that supports identification of populations vulnerable to chronic disease disparities and chronic disease risk factors.
- Create Health Information Exchanges and fund data collaborations that support HIP metrics and indicators for all populations including demographics and qualitative data that support assessment and improvement of health equity.
- Assure that Health Information Exchanges include a wide range of health measures for use at the county/regional level including income, education, race/ethnicity, health risks (tobacco use, BMI, physical activity, sugar sweetened beverage and fruit/vegetable consumption at a minimum), clinical services, and emergency and hospitalization data, so that outcomes and return on investment of interventions can be measured for all populations including those most vulnerable to chronic diseases and risk factors.

### **Public Employers Health Purchasing Committee**

Organize OHA services such that full integration of mental health, addictions, oral and physical health care is achieved.

OHA purchased health care benefits reimburse:

- evidence-based tobacco cessation that meets US Preventive Services Task Force recommendation
- evidence-based chronic disease self-management programs such as Living Well
- evidence-based weight management programs such as Weight Watchers
- lactation-related durable medical equipment and lactation specialists to provide lactation services
- nutrition consultation with a registered dietitian and physical activity consultation with a certified exercise physiologist, and consider other medical and surgical treatment options following evidence-based reviews
- asthma trigger reduction incentives
- health care benefits provided by all employers include tobacco cessation, lactation services and equipment, preventive screenings, chronic disease self-management, mental health, addictions and dental care

### **Health Incentives and Outcomes Committee**

- Integrate the Chronic Care Model into the medical home
- Establish referral and care coordination systems between medical/behavioral health homes and community services and resources
- Insurers provide coverage for tobacco cessation, lactation services and equipment, preventive screenings, chronic disease self-management, mental health, addictions and dental care
- Insurers reimburse for evidence-based chronic disease self-management programs (e.g. Living Well, Asthma Home Visits)
- Standardized clinical practices are established for chronic disease prevention, such as Body Mass Index (BMI) calculations, oral health screening, tobacco use prevention and cessation
- Health care providers provide screening and anticipatory guidance for adolescents recommended by the Guidelines for Health Supervision for Adolescents (Bright Futures by AAP and DHHS), such as BMI, lipid screening, tobacco use and cessation, social-emotional health, and alcohol and drug use
- Require all birthing hospitals to meet WHO/UNICEF breastfeeding-friendly criteria

- Collect and make available emergency transport, emergency department, and hospitalization data
- Disseminate Childhood Hunger Coalition's "Childhood Hunger" toolkits and Continuing Medical Education (CME) training to pediatric and family practice providers across Oregon, including local resources to refer those with food insecurities
- Family planning services include preconception health assessment and education to prevent chronic diseases in future generations

### **Healthcare Workforce Committee**

- Develop a required standard or competency for health professional licensing/certification that includes preventive practices about physical activity, nutrition, breastfeeding, oral health, mental health, and healthy and safe home environments
- Develop and implement a Public Health internship program for high school and college students in local and state public health agencies.
- Workforce needs for a fully functioning, robust public health system in Oregon include the following (from Oregon State University and Conference of Local Health Officials (CLHO):
  - Oregon needs an accredited school of public health to train and retain a high functioning public health workforce. Establishing a school/college of public health at one or more universities is a critical step if Oregon is to produce the estimated 240 graduates per year that it will need.
  - Many among the workforce lack public health training and are not well prepared to conduct population based approaches, which is the heart of the profession. Oregon needs to establish and offer continuing education and certification opportunities for the current public health workforce.
- The use of community health worker programs is a strategy that has been demonstrated to be effective at reducing the disparities of care that occur within the context of health care delivery (referenced from the Oregon Health Fund Board report, Building Block 5, Ensure Health Equity for All, November 2008). Oregon should explore the following:
  - Providing direct reimbursement for Community Health Workers (CHWs) for publicly-sponsored health programs.
  - The Legislature supports Community Health Worker programs that recruit and train members of underserved communities to provide culturally and linguistically competent health services within that community.
  - The Oregon Health Authority, in coordination with the Oregon Healthcare Workforce Institute and other groups builds a culturally competent workforce that reflects the diversity of Oregonians.

## Next Steps

By June 2011, the HIP Committee, in accordance with its charter and with guidance from the Oregon Health Policy Board, will develop a two-year operational plan.

In the long term, developing a process for implementing the Health Improvement Plan in collaboration with multiple partners in communities across the state will be essential to achieving the plan's goals. Public health agencies, tribes, community-based organizations, hospitals, health plans, clinics, social service agencies, employers, schools, early childhood education and child care programs, colleges and universities, housing, transportation, land use and economic development agencies all have a stake in improving conditions so all Oregonians can live as healthy as possible. Building relationships, common goals and commitments among these sectors is crucial to the Oregon Health Improvement Plan's success.

Equally important in this effort will be developing the evaluation and continuous quality improvement processes to track success of implementation efforts and impact of their health equity components on Oregon's diverse populations. Collecting and reporting data for population groups by age, race, ethnicity, geographic location, ability, income and education will be challenging, but critical to ensuring that resources and actions are directed where they are most needed, and that these actions bring about real change and improvement sought in the Health Improvement Plan.

**Appendices**

**Health Improvement Plan Acronyms**

BMI	Body Mass Index
CDC	Centers for Disease Control and Prevention
DHS	Department of Human Services (Oregon)
ED	Emergency Department
DMAP	Department of Medical Assistance Program (Oregon's Medicaid Program)
HIP	Health Improvement Plan
HIP Committee	Health Improvement Plan Committee
ODE	Oregon Department of Education
OEBB	Oregon Educators Benefits Board
OHPB	Oregon Health Policy Board
OHA	Oregon Health Authority
OHP	Oregon Health Plan
OSU	Oregon State University
PEBB	Public Employers Benefits Board

**Oregon Health Policy Board  
Oregon Health Improvement Plan (HIP) Committee  
Roster 2010**

**Tammy Bray, Chair**

Dean and Professor  
Oregon State University  
Corvallis, OR

**Ginny Ehrlich**

Executive Director  
Alliance for a Healthier Generation  
Portland, OR

**Lila Wickham, Vice-Chair**

Public Health Manager  
Multnomah County Health Department  
Portland, OR

**Gayle Evans**

Vice President, Human Resources  
Unitus Community Credit Union  
Portland, OR

**Keith Bachman**

Physician  
Kaiser Permanente  
Portland, OR

**Jill Fuglister**

Co-Director  
Coalition for a Livable Future  
Portland, OR

**Rachael Banks**

Policy Coordinator  
Multnomah County Health Department  
Portland, OR

**Scott Johnson**

Director  
Deschutes County Health Services  
Bend, OR

**Sonciray Bonnell**

Health Resource Coordinator  
NW Portland Area Indian Health Board  
Portland, OR

**Chris Kabel**

Program Officer  
Northwest Health Foundation  
Portland, OR

**Donald Bruland**

Program Director  
Rogue Valley Council of Governments  
(Area Agencies on Aging)  
Central Point, OR

**Paul Kaiser**

Director, Health Benefits  
JELD-WEN  
Redmond, OR

**Rhonda Busek**

Healthcare Administration  
Trillium Community Health Plan  
Lane Individual Practice Association  
Eugene, OR

**Cheryle Kennedy**

Chairwoman  
Grand Ronde Tribal Council  
Grand Ronde, OR

# **FINAL** Oregon Health Improvement Plan: 2011 - 2020

---

**Daniel Munoz**

Child Clinical Psychologist  
Asst Professor of Clinical Psychologist  
Pacific University  
Portland, OR

**Sally Norby**

Executive Director  
American Diabetes Association  
Portland, OR

**Susan Peithman**

Statewide Advocate  
Bicycle Transportation Alliance  
Portland, OR

**Heidi Pierce**

Community Member  
Portland, OR

**Alejandro Queral**

Community Wellness/Prevention Coord.  
Multnomah County Health Department  
Portland, OR

**Bonnie Reagan**

Family Medicine Physician  
Oregon Academy of Family Physicians  
Portland, OR

**Jared Short**

Market President-Oregon  
Regence BlueCross BlueShield  
Portland, OR

**Laura Sisulak**

Strategic Advisor & Special Projects Director  
Oregon Primary Care Association  
Portland, OR

**Laurie Trieger**

Executive Director  
Lane Coalition for Healthy Active Youth  
Eugene, OR

**Larry Wallack**

Dean and Professor of Public Health  
College of Urban and Public Affairs  
Portland, OR

**Pei-ru Wang**

Community Health Educator/Researcher  
Community Development Specialist  
Immigrant Refugee & Community Organization,  
Portland, OR

**Katrina Weist**

Wellness Coordinator  
Bend/LaPine Nutrition Services  
Bend, OR

**Oregon Health Improvement Plan**

**Committee Staff**

**Katrina Hedberg**

State Epidemiologist and Administrator  
Office of Disease Prevention and Epidemiology  
Oregon Public Health Division

**Jane Moore**

Health Promotion & Chronic Disease  
Prevention Section Manager  
Oregon Public Health Division

**Danna Hastings**

Chronic Disease Manager  
Health Promotion & Chronic Disease Prevention  
Oregon Public Health Division

**Patricia Schoonmaker**

Partnership & Planning Lead  
Health Promotion & Chronic Disease Prevention  
Oregon Public Health Division

**Oregon Health Improvement Plan**

**Committee Board Liaisons**

**Lillian Shirley**, Administrator  
Multnomah County Health Department

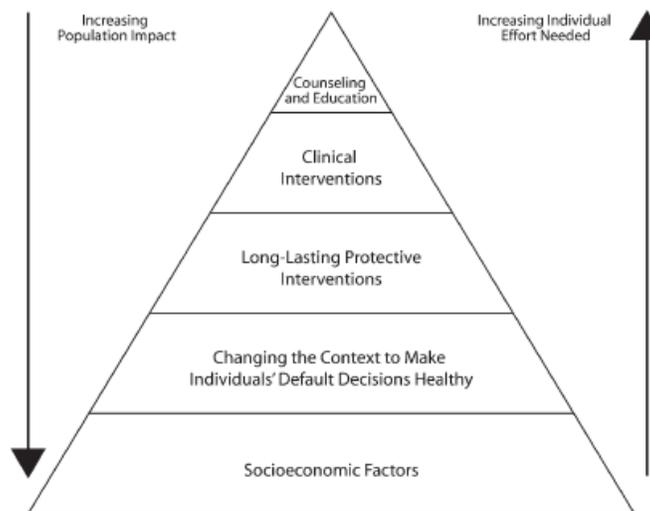
**Carlos Crespo**

Community Health Faculty  
Portland State University

## Health Improvement Plan Guiding Principles

- **Prevention** is the highest priority for improving population health from pre-conception to the elderly ages
- Focus on **evidence based**, best and promising practice and interventions incorporating policy systems and environmental approaches
- Achieve **health equity** among population groups
- Address the conditions that impact **social, economic and environmental determinants** of health because health behaviors are affected by a large number of factors beyond motivation and knowledge.
- **Respect** cultural integrity, traditions and perceptions
- Provide **sustainable resources** and stimulate communities at the local and regional level to **develop local and regional solutions to community health** problems based upon state wide health improvement plan goals
- Assure availability of community level **data for assessment**
- Reduce **tobacco** use and exposure and reduce **obesity**
- Create **short and long term actionable** policies, measurable outcomes and return in investments

### The Health Impact Pyramid



**Population Health Definition**

Population health refers to the health of a population as measured by health status indicators and as influenced by social, economic, and physical environments, personal health practices, individual capacity and coping skills, human biology, early childhood development, and health services. (Health Canada)

**Population Health Approaches**

As an approach, population health focuses on interrelated conditions and factors that influence the health of populations over the life course, identifies systematic variations in their patterns of occurrence, and applies the resulting knowledge to develop and implement policies and actions to improve health and well being of those populations. (Health Canada)

# FINAL Oregon Health Improvement Plan: 2011 - 2020

## Oregon Health Improvement Plan Committee Proposed Population Health Measures

Measure	Data Source(s)	Available For				
		Child	Adult	Race/ Ethnicity	County	
<b>OVERALL MEASURES</b>						
	Good or excellent health status (physical and mental)	BRFSS; OHT; OSWS	X	X	X	X
	Premature Death	CHS	-	-	X	X
<b>GOAL I: Achieve health equity and population health by improving social, economic and environmental factors.</b>						
<b>Educational attainment</b>	Participation in early childhood education	ODE	X	-	-	-
	Oregon high school graduation	ODE	-	X	X	-
	Post secondary degree	ACS	-	X	X	X
<b>GOAL II: Prevent chronic diseases by reducing obesity prevalence, tobacco use, and alcohol abuse.</b>						
<b>Overarching</b>	Tobacco and obesity-related chronic disease burden (e.g. cancer, cardiovascular disease, diabetes, asthma, arthritis)	BRFSS	-	X	X	X
	Consumption of tobacco, alcohol, and sugar-sweetened beverages	Department of Revenue; OLCC			Statewide Only	
<b>Tobacco</b>	Tobacco use	BRFSS; OHT; Birth file	X	X	X	X
<b>Obesity</b>	Obesity (BMI)	BRFSS; OHT; PedNSS	X	X	X	X
	Soda/sugar sweetened beverages	BRFSS; OHT; PRAMS-2	X	X	X	X
	Physical activity meeting CDC recommendations	BRFSS; OHT	X	X	X	X
<b>Alcohol abuse</b>	Heavy drinking	BRFSS; OHT; OSWS	X	X	X	X
<b>GOAL III: Stimulate public health, community, and health system linkages, innovation and integration that increase coordination and</b>						
<b>Communities</b>	Participation in evidence-based chronic disease self-management programs					
	- Living Well with Chronic Conditions	LWD	-	X	X	X
	Health collaborative established and tracking health outcomes	Special Survey	-	-	-	X
<b>Health Departments</b>	Community health assessment done in collaboration with local health departments and hospitals	Special Survey	-	-	-	X
	State/local health departments applying for accreditation*	Special Survey	-	-	-	X
<b>Health Systems</b>	Hospital readmissions	HDI				See Incentives and Outcomes Report
	Preventable hospital admissions	HDI				See Incentives and Outcomes Report

\* Application for accreditation includes assessment, quality improvement plan, and health improvement plan.

ACS=American Community Survey  
 BRFSS = Behavioral Risk Factor Surveillance System  
 CHS = Oregon Center for Health Statistics  
 DMAP = Division of Medical Assistance Programs  
 HDI = Hospital Discharge Index  
 LWD = Living Well Database  
 ODE = Oregon Department of Education  
 OFH = Office of Family Health  
 OHT = Oregon Healthy Teens Survey  
 OLCC = Oregon Liquor Control Commission  
 OSWS = Oregon Student Wellness Survey  
 PedNSS = Pediatric Nutrition Surveillance System  
 PRAMS-2 = Pregnancy Risk Assessment Monitoring System reinterviewing when baby is 2 years old

**Good or Excellent Health Status**

		8th graders		11th graders		Adults 18+ years old
		Mental	Physical	Mental	Physical	Overall
Oregon overall		86.0%	88.4%	83.5%	87.9%	87.1%
Race/ Ethnicity	African American	85.0%	87.0%	78.4%	95.5%	74.7%
	American Indian	83.3%	92.2%	76.6%	85.7%	69.0%
	Asian/Pacific Islander	86.9%	82.8%	80.2%	89.8%	90.5%
	Hispanic/Latino	85.5%	88.0%	82.8%	88.7%	71.2%
	White	86.6%	89.6%	84.7%	88.3%	86.2%
County	Baker	85.9%	86.6%	85.2%	87.3%	84.2%
	Benton	86.7%	91.7%	85.3%	91.5%	89.8%
	Clackamas	87.4%	90.3%	84.2%	88.9%	88.1%
	Clatsop	85.3%	89.3%	82.5%	88.7%	82.8%
	Columbia	87.1%	89.7%	78.9%	89.4%	84.1%
	Coos	85.7%	90.3%	79.6%	89.1%	80.7%
	Crook	86.6%	89.4%	82.8%	79.4%	86.3%
	Curry	83.6%	87.0%	83.0%	90.1%	82.0%
	Deschutes	86.2%	90.3%	83.0%	90.1%	89.1%
	Douglas	87.8%	90.1%	82.2%	84.7%	80.3%
	Gilliam	86.0%	98.6%	86.3%	94.9%	85.3%
	Grant	89.8%	95.2%	85.9%	91.9%	86.7%
	Harney	85.3%	90.6%	85.6%	90.0%	84.2%
	Hood River	89.9%	90.0%	84.1%	90.3%	81.8%
	Jackson	84.9%	91.7%	83.8%	91.0%	85.9%
	Jefferson	85.1%	88.4%	83.6%	81.8%	82.0%
	Josephine	--	--	--	--	78.9%
	Klamath	84.7%	89.4%	81.4%	89.4%	82.1%
	Lake	76.0%	88.0%	83.7%	86.0%	84.5%
	Lane	86.1%	89.7%	85.7%	89.2%	86.1%
	Lincoln	81.6%	86.1%	82.5%	87.7%	79.3%
	Linn	86.3%	90.2%	82.1%	89.9%	81.8%
	Malheur	87.2%	89.8%	84.5%	86.1%	82.4%
	Marion	82.9%	88.9%	83.9%	85.9%	85.6%
	Morrow	86.3%	87.1%	87.1%	91.0%	81.2%
	Multnomah	86.6%	89.9%	84.2%	86.9%	85.8%
	Polk	89.4%	90.6%	79.7%	94.5%	85.0%
	Sherman	86.7%	93.3%	*	*	79.2%
	Tillamook	90.4%	88.9%	86.0%	85.2%	87.9%
	Umatilla	86.5%	90.0%	85.0%	85.7%	82.8%
Union	83.6%	91.1%	81.4%	89.2%	86.0%	
Wallowa	--	--	--	--	89.6%	
Wasco	88.2%	91.4%	80.7%	87.7%	79.2%	
Washington	86.2%	87.8%	84.9%	90.0%	87.4%	
Wheeler	*	*	86.3%	83.8%	85.3%	
Yamhill	88.6%	90.5%	82.9%	88.4%	82.1%	

OHA Group	DMAP	Adults	45.1%
	OEBB	Adults	94.3%
	PEBB	Adults	92.7%

Good or excellent health status definition

Among youth: Report of good or excellent physical health or mental health status (asked separately).

Among adults: Report of good or excellent health status.

Note:  
All adult data are age-adjusted to year 2000 standard population to enable comparisons within race/ethnic and county groupings. However, data in this table may represent different time periods among population groups.

-- This number is not available  
\* This number is suppressed because it is statistically unreliable.

**Premature Death**

		Ages 0 to less than 75 years old
Oregon overall		6,488
Race/ Ethnicity	African American	8,608
	American Indian	9,353
	Asian/Pacific Islander	3,484
	Hispanic/Latino	3,983
	White	6,641
County	Baker	6,814
	Benton	4,650
	Clackamas	5,289
	Clatsop	6,983
	Columbia	7,911
	Coos	7,582
	Crook	5,044
	Curry	8,789
	Deschutes	4,443
	Douglas	8,446
	Gilliam	8,712†
	Grant	8,026
	Harney	7,602
	Hood River	4,090
	Jackson	6,771
	Jefferson	9,020
	Josephine	9,267
	Klamath	9,821
	Lake	5,848
	Lane	7,138
	Lincoln	8,088
	Linn	8,170
	Malheur	7,742
	Marion	6,959
	Morrow	7,083
	Multnomah	7,028
	Polk	6,774
	Sherman	7,252†
	Tillamook	6,258
	Umatilla	7,076
Union	6,379	
Wallowa	3,650	
Wasco	6,180	
Washington	4,669	
Wheeler	3,745†	
Yamhill	6,371	

Premature Death definition  
 The number of years of potential life lost for those who died before the age of 75 per 100,000 Oregonians in the state, a race/ethnic group, or in a county.

Note:  
 All data are age-adjusted to enable comparisons across population groups.

† This number may be statistically unreliable; interpret with caution

**Educational Attainment**

		birth to 4 years old participated*
	Oregon overall	28.7%
County	Baker	20.1%
	Benton	18.6%
	Clackamas	21.6%
	Clatsop	24.7%
	Columbia	34.1%
	Coos	37.8%
	Crook	12.1%
	Curry	42.9%
	Deschutes	34.3%
	Douglas	31.3%
	Gilliam	64.3%
	Grant	13.9%
	Harney	67.6%
	Hood River	59.4%
	Jackson	36.4%
	Jefferson	99.7%
	Josephine	38.8%
	Klamath	36.4%
	Lake	52.1%
	Lane	24.1%
	Lincoln	30.6%
	Linn	14.6%
	Malheur	48.5%
	Marion	25.7%
	Morrow	43.8%
	Multnomah	28.7%
	Polk	26.4%
Sherman	130.8%	
Tillamook	21.3%	
Umatilla	70.7%	
Union	23.5%	
Wallowa	38.8%	
Wasco	137.1%	
Washington	24.2%	
Wheeler	64.3%	
Yamhill	18.4%	

Participation in early childhood education

Number served over number eligible for Oregon Prekindergarten Program and Early Head Start. Program year 2009-2010 (data pulled January 2010)

\*The number of eligible was derived from the Office of Economic Analysis Long Term State/County forecast for population ages 0 to 4 years old and poverty rate ages 0 to 4 years old from PSU estimate 2008-2010. The population forecast was last updated in April of 2004, which might not reflect true population. Therefore, some counties may have lower number of eligible than number served.

		Adults 18+ years old
	Oregon overall	66.2%
Race/ Ethnicity	African American	47.7%
	American Indian	51.7%
	Asian/Pacific Islander	78.5%
	Hispanic/Latino	52.6%
	White	70.1%

Oregon high school graduation

The Four-year Cohort Graduation Rate (CGR) is the percent of students who received a regular diploma within four years of entering high school. The rate for a particular school takes into account transfers into and out of the school during the four years.

CGR = Number of students in the adjusted cohort that received regular high school diplomas by August 2009 / The number of first-time 9th graders in 2005-06, adjusted for transfers in and out.

**FINAL Oregon Health Improvement Plan: 2011 - 2020**

		Adults 25+ years old
Oregon overall		35.9%
Race/ Ethnicity	African American	56.0%
	American Indian	34.2%
	Asian/Pacific Islander	68.3%
	Hispanic/Latino	29.5%
	White	62.9%
County	Baker	--
	Benton	55.5%
	Clackamas	38.9%
	Clatsop	29.6%
	Columbia	25.4%
	Coos	24.6%
	Crook	22.9%
	Curry	23.5%
	Deschutes	38.2%
	Douglas	22.9%
	Gilliam	--
	Grant	--
	Harney	--
	Hood River	33.3%
	Jackson	31.3%
	Jefferson	22.6%
	Josephine	25.7%
	Klamath	27.0%
	Lake	36.2%
	Lane	29.7%
	Lincoln	--
	Linn	23.4%
	Malheur	20.9%
	Marion	30.1%
	Morrow	--
	Multnomah	43.1%
	Polk	33.8%
	Sherman	--
	Tillamook	24.5%
	Umatilla	24.7%
Union	29.2%	
Wallowa	--	
Wasco	30.9%	
Washington	46.0%	
Wheeler	--	
Yamhill	29.4%	

Post secondary degree

American community Survey provide level of education attained degree received among population twenty-five years and older (2006-2008).

Note: For race and ethnicity, it is define having some college or higher. For county, it is define as having an associate's degree or higher.

-- This number is not available

**Tobacco and obesity-related chronic disease burden**

		Adults 18+ years old
Oregon overall		39.0%
Race/ Ethnicity	African American	58.1%
	American Indian	54.8%
	Asian/Pacific Islander	34.0%
	Hispanic/Latino	29.1%
	White	39.7%
County	Baker	45.3%
	Benton	34.8%
	Clackamas	38.6%
	Clatsop	37.6%
	Columbia	44.4%
	Coos	36.9%
	Crook	38.3%
	Curry	38.2%
	Deschutes	38.1%
	Douglas	50.3%
	Gilliam	17.7%^
	Grant	35.6%
	Harney	41.6%
	Hood River	31.0%
	Jackson	36.0%
	Jefferson	40.9%
	Josephine	44.1%
	Klamath	47.0%
	Lake	44.8%
	Lane	40.8%
	Lincoln	47.4%
	Linn	42.6%
	Malheur	39.0%
	Marion	38.1%
	Morrow	42.1%
	Multnomah	37.2%
	Polk	36.0%
	Sherman	35.5%^
	Tillamook	36.0%
	Umatilla	41.1%
Union	39.1%	
Wallowa	27.0%	
Wasco	35.5%^	
Washington	34.8%	
Wheeler	17.7%^	
Yamhill	42.8%	
OHA Group	DMAP	--
	OEBB	30.0%
	PEBB	32.4%

Tobacco and obesity-related chronic disease burden definition

Among adults: Having a diagnosis of arthritis, asthma, cardiovascular disease or diabetes.

Note:  
All adult data are age-adjusted to year 2000 standard population to enable comparisons within race/ethnic and county groupings. However, data in this table may represent different time periods among population groups.

Special Note:  
Data on lifetime cancer diagnoses are currently not available by race/ethnicity or county. This Population Health Metric will also incorporate data on cancer prevalence in the future, and thus estimates may appear higher.

-- This number is not available

^ Combined numbers for Gilliam/Wheeler and Sherman/Wasco counties

**Smoking**

		8th graders	11th graders	Adults 18+ years old	Pregnant Women
Oregon overall		9.9%	14.9%	17.5%	12.2%
Race/ Ethnicity	African American	8.9%†	14.5%†	29.9%	15.7%
	American Indian	19.4%	16.0%	38.3%	22.3%
	Asian/Pacific Islander	9.7%	5.5%†	9.8%	2.8%
	Hispanic/Latino	14.5%	19.4%	14.0%	2.9%
	White	8.4%	15.9%	20.2%	14.6%
County	Baker	7.3%	23.4%	19.7%	25.0%
	Benton	5.2%	12.8%	10.8%	7.2%
	Clackamas	7.9%	17.6%	17.1%	10.4%
	Clatsop	9.8%	24.2%	23.0%	20.2%
	Columbia	10.8%	20.0%	20.3%	19.8%
	Coos	10.0%	24.4%	26.6%	23.4%
	Crook	16.8%	24.9%	27.3%	20.4%
	Curry	8.4%	17.5%	14.4%	25.0%
	Deschutes	11.5%	19.1%	19.8%	12.1%
	Douglas	12.5%	20.1%	27.3%	24.6%
	Gilliam	10.0%^	8.7%^	14.4%^	*
	Grant	4.7%	20.6%	19.8%	12.9%
	Harney	11.7%	19.5%	30.3%	18.5%
	Hood River	4.6%	14.5%	8.8%	5.6%
	Jackson	10.7%	17.8%	20.9%	14.9%
	Jefferson	10.2%	16.5%	19.0%	11.0%
	Josephine	--	--	28.3%	23.0%
	Klamath	11.4%	20.7%	25.3%	20.2%
	Lake	12.0%	9.3%	20.7%	22.1%
	Lane	8.4%	15.0%	19.9%	14.3%
	Lincoln	8.7%	21.6%	28.5%	21.9%
	Linn	9.1%	23.0%	22.2%	19.9%
	Malheur	10.2%	16.5%	15.6%	9.0%
	Marion	9.0%	13.3%	17.2%	11.1%
	Morrow	9.6%	18.2%	23.2%	13.8%
	Multnomah	7.5%	17.5%	19.6%	10.8%
	Polk	8.8%	9.2%	15.8%	12.7%
	Sherman	10.0%^	8.7%^	21.8%^	*
	Tillamook	6.6%	17.0%	20.2%	19.2%
	Umatilla	8.3%	15.3%	24.6%	14.6%
Union	8.7%	15.3%	16.0%	17.6%	
Wallowa	--	--	12.0%	18.7%	
Wasco	13.5%	12.6%	21.8%^	17.5%	
Washington	6.8%	12.7%	13.1%	5.0%	
Wheeler	10.0%^	8.7%^	14.4%^	*	
Yamhill	8.6%	16.8%	20.4%	12.3%	

Smoking definition

Among youth: Having smoked cigarettes on one or more of the past 30 days.

Among adults: Having smoked at least 100 cigarettes in entire life and now smoke everyday or some days.

Among pregnant women: Percentage of live births in which the mother reported smoking during pregnancy, among births for which the mother's smoking status is known.

Note:  
All adult data are age-adjusted to year 2000 standard population to enable comparisons within race/ethnic and county groupings. However, data in this table may represent different time periods among population groups.

OHA Group	DMAP	Adults	37.0%
	OEBB	Adults	5.0%
	PEBB	Adults	8.8%

-- This number is not available  
 † This number may be statistically unreliable; interpret with caution  
 \* This number is suppressed because it is statistically unreliable.  
 ^ Combined numbers for Gilliam/Wheeler and Sherman/Wasco counties

**Obesity**

		8th graders	11th graders	Adults 18+ years old
Oregon overall		11.2%	10.4%	24.1%
Race/ Ethnicity	African American	10.4%†	7.2%†	28.7%
	American Indian	12.6%	9.4%†	30.3%
	Asian/Pacific Islander	12.2%	6.0%†	14.7%
	Hispanic/Latino	13.7%	12.2%	30.9%
	White	10.0%	10.5%	24.2%
County	Baker	12.9%	7.5%	21.1%
	Benton	6.6%	8.0%	19.5%
	Clackamas	9.0%	9.8%	23.0%
	Clatsop	10.1%	15.4%	24.8%
	Columbia	16.0%	9.6%	32.3%
	Coos	10.8%	10.9%	27.8%
	Crook	11.4%	14.5%	23.6%
	Curry	14.6%	13.2%	24.4%
	Deschutes	9.0%	8.1%	18.3%
	Douglas	12.3%	14.0%	28.1%
	Gilliam	*	*	19.1%
	Grant	6.9%†	10.1%	27.9%
	Harney	11.5%	11.2%	35.2%
	Hood River	10.7%	10.9%	24.4%
	Jackson	11.1%	8.2%	20.7%
	Jefferson	14.0%	11.5%	28.1%
	Josephine	--	--	23.8%
	Klamath	9.5%	12.8%	28.0%
	Lake	*	21.4%	26.5%
	Lane	9.9%	11.3%	25.3%
	Lincoln	15.2%	11.8%	28.6%
	Linn	11.7%	12.4%	30.9%
	Malheur	16.7%	12.6%	35.4%
	Marion	12.6%	11.6%	28.3%
	Morrow	13.3%	10.2%	37.9%
	Multnomah	10.9%	11.0%	20.6%
	Polk	12.5%	15.9%	27.8%
	Sherman	*	*	25.6%
	Tillamook	16.7%	17.1%	24.1%
	Umatilla	12.5%	14.7%	32.8%
	Union	12.9%	10.6%	22.1%
	Wallowa	--	--	14.6%
Wasco	18.7%	12.4%	25.6%	
Washington	10.2%	10.0%	22.7%	
Wheeler	*	*	19.1%	
Yamhill	11.6%	12.4%	28.1%	
OHA Group	DMAP	Adults	--	
	OEBB	Adults	28.1%	
	PEBB	Adults	27.9%	
	WIC	Children 2 to <5 years old	15.0%	

Obesity definition

Among youth: Body mass index at or above the 95% percentile for age and sex.

Among adults: Body mass index greater than or equal to 30 kg/m<sup>2</sup>.

Note:

All adult data are age-adjusted to year 2000 standard population to enable comparisons within race/ethnic and county groupings. However, data in this table may represent different time periods among population groups.

-- This number is not available

† This number may be statistically unreliable; interpret with caution

\* This number is suppressed because it is statistically unreliable.

**Soda/Sugar-Sweetened Beverages**

		Two year olds	8th graders	11th graders	Adults 18+ years old
Oregon overall		49.9%	20.6%	19.3%	10.0%
Race/ Ethnicity	African American	66.4%	31.3%	27.2%	--
	American Indian	58.4%	28.9%	31.2%	--
	Asian/Pacific Islander	46.1%	15.5%	9.5%	--
	Hispanic/Latino	74.9%	22.7%	19.8%	--
	White	43.4%	19.3%	20.2%	--
County	Baker	--	29.0%	35.4%	--
	Benton	--	13.3%	14.1%	--
	Clackamas	--	18.0%	17.5%	--
	Clatsop	--	22.8%	17.2%	--
	Columbia	--	22.5%	19.8%	--
	Coos	--	18.1%	20.4%	--
	Crook	--	17.2%	23.9%	--
	Curry	--	18.1%	22.9%	--
	Deschutes	--	20.3%	20.8%	--
	Douglas	--	24.1%	28.5%	--
	Gilliam	--	26.3%†	33.8%†	--
	Grant	--	22.0%	17.5%	--
	Harney	--	14.8%	15.6%	--
	Hood River	--	13.4%	15.4%	--
	Jackson	--	19.6%	20.4%	--
	Jefferson	--	25.3%	24.7%	--
	Josephine	--	--	--	--
	Klamath	--	22.9%	27.7%	--
	Lake	--	22.0%	23.3%	--
	Lane	--	18.3%	17.7%	--
	Lincoln	--	22.8%	27.0%	--
	Linn	--	22.7%	25.7%	--
	Malheur	--	24.9%	23.5%	--
	Marion	--	21.5%	21.3%	--
	Morrow	--	22.7%	25.3%	--
	Multnomah	--	20.1%	17.4%	--
	Polk	--	21.1%	12.9%	--
Sherman	--	*	*	--	
Tillamook	--	17.3%	23.3%	--	
Umatilla	--	20.9%	23.8%	--	
Union	--	19.5%	22.7%	--	
Wallowa	--	--	--	--	
Wasco	--	19.9%	19.6%	--	
Washington	--	19.4%	16.5%	--	
Wheeler	--	*	*	--	
Yamhill	--	18.4%	21.6%	--	

Soda/Sugar-sweetened beverage definition

Among two-year olds: Fruit drinks (excluding juices), Kool-Aid or soda one or more days in a typical week.

Among youth: Seven or more sodas per week.

Among adults: Seven or more sodas or other sugar-sweetened beverages per week.

Notes:  
Data for adults represents only January to July of 2010. It is unweighted and not age-adjusted. Data in this table may represent different time periods among population groups.

-- This number is not available

† This number may be statistically unreliable; interpret with caution

\* This number is suppressed because it is statistically unreliable.

**Physical activity meeting CDC recommendations**

		8th graders	11th graders	Adults 18+ years old
Oregon overall		57.5%	44.3%	56.7%
Race/ Ethnicity	African American	58.5%	45.4%	63.9%
	American Indian	66.3%	56.6%	67.0%
	Asian/Pacific Islander	50.6%	37.6%	54.6%
	Hispanic/Latino	51.4%	43.0%	42.1%
	White	60.6%	45.8%	59.0%
County	Baker	56.4%	62.4%	49.9%
	Benton	54.0%	43.7%	63.4%
	Clackamas	53.9%	49.8%	58.6%
	Clatsop	61.0%	59.7%	57.5%
	Columbia	61.9%	58.7%	62.3%
	Coos	72.4%	58.1%	64.1%
	Crook	56.9%	49.0%	69.2%
	Curry	48.5%	60.7%	63.9%
	Deschutes	61.1%	47.3%	60.9%
	Douglas	61.7%	50.7%	57.2%
	Gilliam	67.2%†	61.0%†	86.7%†^
	Grant	77.6%	56.2%	80.3%
	Harney	52.3%	62.9%	68.6%
	Hood River	44.6%	51.2%	52.3%
	Jackson	63.0%	54.0%	58.7%
	Jefferson	56.9%	52.2%	57.1%
	Josephine	--	--	59.8%
	Klamath	57.9%	51.9%	55.8%
	Lake	78.0%	64.3%†	78.2%
	Lane	58.5%	50.0%	59.9%
	Lincoln	56.3%	57.6%	56.3%
	Linn	62.1%	51.7%	52.3%
	Malheur	54.3%	42.7%	48.4%
	Marion	62.6%	49.5%	53.6%
	Morrow	46.5%	51.6%	56.5%
	Multnomah	52.7%	38.4%	59.1%
	Polk	52.2%	57.3%	58.5%
	Sherman	*	*	60.4%^
	Tillamook	63.5%	47.2%	58.6%
	Umatilla	60.8%	51.2%	50.2%
	Union	67.8%	59.6%	60.7%
	Wallowa	--	--	57.0%
Wasco	57.8%	52.4%	60.4%^	
Washington	50.8%	46.2%	55.4%	
Wheeler	*	58.1%†	86.7%†^	
Yamhill	61.9%	55.9%	57.5%	
OHA Group	DMAP	Adults	--	--
	OEBB	Adults		61.2%
	PEBB	Adults		63.8%

Physical activity definition

Among youth: 60 minutes of moderate activity five or more days a week.

Among adults: Moderate physical activity for 30 minutes 5 days a week or vigorous activity for 20 minutes 3 days a week.

Note:  
All adult data are age-adjusted to year 2000 standard population to enable comparisons within race/ethnic and county groupings. However, data in this table may represent different time periods among population groups.

-- This number is not available  
 † This number may be statistically unreliable; interpret with caution  
 \* This number is suppressed because it is statistically unreliable.  
 ^ Combined numbers for Gilliam/Wheeler and Sherman/Wasco counties

**Heavy Drinking**

		8th graders	11th graders	Adults 18+ years old
Oregon overall		23.2%	38.3%	6.3%
Race/ Ethnicity	African American	18.3%	41.8%	--
	American Indian	30.0%	52.1%	--
	Asian/Pacific Islander	21.5%	26.1%	--
	Hispanic/Latino	26.4%	36.0%	--
	White	22.0%	39.5%	--
County	Baker	27.6%	55.9%	5.4%†
	Benton	20.6%	39.5%	5.0%
	Clackamas	25.3%	44.0%	5.7%
	Clatsop	26.3%	50.8%	6.7%
	Columbia	26.5%	42.1%	7.5%†
	Coos	33.9%	51.5%	7.4%
	Crook	41.3%	47.6%	3.8%†
	Curry	33.6%	43.7%	6.2%†
	Deschutes	34.4%	53.3%	5.9%
	Douglas	34.0%	47.7%	5.7%
	Gilliam	49.0%	53.3%	6.6%†
	Grant	28.0%	54.6%	6.8%†
	Harney	24.0%	48.9%	*
	Hood River	31.0%	45.4%	*
	Jackson	34.8%	48.5%	6.5%
	Jefferson	36.3%	48.8%	4.3%†
	Josephine	---	--	7.0%
	Klamath	38.2%	55.3%	6.8%
	Lake	40.0%	55.0%	12.3%†
	Lane	29.0%	48.7%	5.6%
	Lincoln	31.0%	49.6%	5.1%
	Linn	29.6%	44.2%	5.6%
	Malheur	40.3%	46.3%	5.4%†
	Marion	32.1%	47.6%	3.9%
	Morrow	31.6%	53.5%	*
	Multnomah	28.7%	46.3%	7.1%
	Polk	31.3%	36.7%	2.0%
	Sherman	49.0%	53.3%	5.6%†
	Tillamook	26.9%	47.6%	3.8%†
	Umatilla	29.1%	48.1%	2.7%
Union	28.6%	48.7%	4.5%†	
Wallowa	--	--	4.9%†	
Wasco	35.6%	37.1%	5.6%†	
Washington	25.4%	45.8%	4.4%	
Wheeler	49.0%	53.3%	6.6%†	
Yamhill	30.9%	46.0%	6.6%†	
OHA Group	DMAP	Adults		--
	OEBB	Adults		3.4%
	PEBB	Adults		4.9%

Heavy drinking definitions

Among youth: At least one alcoholic drink in the past 30 days.

Among adults: Having had more than one drink per day for women, or more than two drinks per days for men, on average, during the past 30 days.

Note:  
All adult data are age-adjusted to year 2000 standard population to enable comparisons within race/ethnic and county groupings. However, data in this table may represent different time periods among population groups.

-- This number is not available  
 † This number may be statistically unreliable; interpret with caution  
 \* This number is suppressed because it is statistically unreliable.

**Participation in evidence-based Chronic Disease Self-Management Programs**

		Adults 18+ years old
	Oregon overall	1361
Race/ Ethnicity	African American	15
	American Indian	26
	Asian/Pacific Islander	18
	Hispanic/Latino	177
	White	1050
County	Baker	5
	Benton	81
	Clackamas	26
	Clatsop	0
	Columbia	0
	Coos	43
	Crook	16
	Curry	38
	Deschutes	128
	Douglas	7
	Gilliam	1
	Grant	0
	Harney	9
	Hood River	16
	Jackson	88
	Jefferson	28
	Josephine	26
	Klamath	19
	Lake	0
	Lane	155
	Lincoln	35
	Linn	169
	Malheur	0
	Marion	187
	Morrow	4
	Multnomah	113
	Polk	60
	Sherman	0
	Tillamook	0
	Umatilla	20
Union	6	
Wallowa	7	
Wasco	16	
Washington	52	
Wheeler	0	
Yamhill	6	

Participation in evidence-based chronic disease self-management programs definition

Among adults: Participation in Living Well with Chronic Conditions program.

## Data Sources

### For Baseline Data for OHIP Proposed Population Health Measures

#### **Measure:** Good or Excellent Health Status

##### Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

By county: 2004-07 BRFSS

By race/ethnicity: 2004-05 BRFSS

DMAP: 2004 Health Risk Health Status Survey (HRHSS)

PEBB/OEBB: 2009/2010 BRFSS Survey of State/School Employees (BSSE)

##### Youth

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders: 2009 Oregon Healthy Teens (OHT)

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by county: 2007-08 OHT

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by race/ethnicity: 2009 OHT

#### **Measure:** Premature Death

2007 Oregon Death Certificate Statistical File

#### **Measure:** Educational Attainment

Participation in early childhood education

2009-2010 Oregon Department of Education (ODE) data

Oregon high school graduation

2008-2009 ODE dropout data (<http://www.ode.state.or.us/search/page/?id=1>, accessed October 21, 2010)

Post secondary degree

2006-2008 American Community Survey 3-Year Estimates

([http://factfinder.census.gov/servlet/DatasetMainPageServlet?\\_program=ACS&\\_subme nuld=people\\_5&\\_lang=en&\\_ts=](http://factfinder.census.gov/servlet/DatasetMainPageServlet?_program=ACS&_subme nuld=people_5&_lang=en&_ts=), accessed October 21, 2010)

#### **Measure:** Tobacco and Obesity-related Chronic Disease Burden

##### Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

By county: 2004-07 BRFSS

By race/ethnicity: 2004-05 BRFSS

DMAP: 2004 Health Risk Health Status Survey (HRHSS)

PEBB/OEBB: 2009/2010 BRFSS Survey of State/School Employees (BSSE)

**Measure: Smoking**

Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

By county: 2004-07 BRFSS

By race/ethnicity: 2004-05 BRFSS

DMAP: 2007 Consumer Assessment of Health Plans and Systems (CAHPS) Survey

PEBB/OEBB: 2009/2010 BRFSS Survey of State/School Employees (BSSE)

Pregnant women

2003-07 Birth Certificate Statistical Files

Youth

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders: 2009 Oregon Healthy Teens (OHT)

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by county: 2007-08 OHT

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by race/ethnicity: 2009 OHT

**Measure: Obesity**

Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

By county: 2004-07 BRFSS

By race/ethnicity: 2004-05 BRFSS

DMAP: 2004 Health Risk Health Status Survey (HRHSS)

PEBB/OEBB: 2009/2010 BRFSS Survey of State/School Employees (BSSE)

Youth

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders: 2009 Oregon Healthy Teens (OHT)

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by county: 2007-08 OHT

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by race/ethnicity: 2009 OHT

**Measure: Soda/Sugar-Sweetened Beverages**

Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)

Two year olds

2006-07 Pregnancy Risk Assessment Monitoring System-2 (PRAMS-2)

Youth

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders: 2009 Oregon Healthy Teens (OHT)

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by county: 2007-08 OHT

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by race/ethnicity: 2009 OHT

**Measure:** Physical Activity Meeting CDC Recommendations

Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)  
By county: 2004-07 BRFSS  
By race/ethnicity: 2004-05 BRFSS  
PEBB/OEBB: 2009/2010 BRFSS Survey of State/School Employees (BSSE)

Youth

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders: 2009 Oregon Healthy Teens (OHT)  
Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by county: 2007-08 OHT  
Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by race/ethnicity: 2009 OHT

**Measure:** Heavy Drinking

Adults

Overall: 2009 Behavioral Risk Factor Surveillance System (BRFSS)  
By county: 2004-07 BRFSS  
PEBB/OEBB: 2009/2010 BRFSS Survey of State/School Employees (BSSE)

Youth

Oregon 8<sup>th</sup> and 11<sup>th</sup> graders: 2009 Oregon Healthy Teens (OHT)  
Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by county: 2007-08 OHT  
Oregon 8<sup>th</sup> and 11<sup>th</sup> graders by race/ethnicity: 2009 OHT

**Measure:** Participation in Evidence-based Chronic Disease Self-management Programs

Living Well with Chronic Conditions Database (2009)

## **Metrics Definitions**

### **Good or Excellent Health Status (physical and mental)**

**Description:** Good or excellent health status is a measure of a population's self-perceptions of overall health. Data are collected from surveys of adults eighteen years of age and older using the Behavioral Risk Factors Surveillance System (BRFSS) and children in the 8<sup>th</sup> and 11<sup>th</sup> grades using the Oregon Healthy Teen (OHT) and the Oregon Student Wellness Survey (OSWS). Adults are asked about their general health, which would include both physical and emotional/mental health. Youth are asked about their physical and emotional/mental health separately. Emotional/mental health targets stress, depression, and problems with emotions.

**Rationale:** The World Health Organization (WHO, 1948) stated, "Health is a state of complete physical, mental, and social well-being, and not merely the absence of disease or infirmity." The question for self-perception of health status is a measure of a population's overall health, which aligns with the WHO definition of health. It provides a longstanding measure used to track progress on improvements in a population's quality of life.

### **Premature Death**

**Description:** Premature death is measured using the Years of Potential Life Lost (YPLL). YPLL is a measure of overall disease burden, expressed as the number of years lost before the age of 75 due to ill health, disability, or early death. The number is expressed as the age-adjusted average years of life lost before the age of 75. The years of life lost are standardized to a population of 100,000.

**Rationale:** YPLL is a common measure of premature death and is the mortality measure used for the County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin.

### **Participation in Early Childhood Education**

**Description:** The Oregon Prekindergarten Program (OPK) is a federal/state partnership supporting a collaborative federal Head Start and state prekindergarten system providing comprehensive child development and education services to at-risk 3 and 4 year olds from low-income families. Children in foster care and children who are homeless are also automatically eligible. At least 10% of the enrollment slots in OPK are reserved for children with disabilities. Early Head Start is a program that begins prenatally and spans the years from birth to age-3. It is primarily funded with federal

dollars, but received state funding for the first time in 2010. The Oregon Department of Education has data for the numbers served and numbers eligible in both OPK and Early Head Start.

**Rationale:** Participation in Head Start programs is an U.S Department of Health and Human Services Administration-wide effort to close achievement gaps and promote early learning through the first eight years of life for the nation's most vulnerable children.

### **Oregon High School Graduation**

**Description:** High school graduation from Oregon schools is tracked by the Oregon Department of Education. High school graduation rates are measured by looking at four-year cohorts. The 2008-09 cohort is made up of the students who first entered high school in 2005-06. The cohort is adjusted for students who move into or out of the system, emigrate to another country, or are deceased. The cohort graduation rate is calculated by taking the number of students in the cohort who graduated with a regular diploma within four years and dividing that by the total number of students in the cohort. Oregon's four-year cohort graduation rate for 2008-09 is 66%. This is the number of students who graduated with a regular diploma within four years of entering high school. The remaining 34% is made up of those students who took longer than four years to graduate with a regular high school diploma, received a modified diploma, GED, adult high school diploma, alternative certificate, or dropped out of high school.

**Rationale:** Better educated people have lower morbidity rates from the most common acute and chronic diseases, independent of basic demographics and labor market factors. Graduation from high school can help with tracking improvements in overall population educational attainment and highlight gaps among disadvantaged populations.

### **Post Secondary Degree**

**Description:** Post-secondary education refers to a level of education that is provided at academies, universities, colleges, institutes of technology, and certain other collegiate-level institutions, such as vocational schools, trade schools, and career colleges, that award academic degrees or professional certifications. American Community Survey provides level of education attained either grade completed or degree received among population twenty-five years and older.

**Rationale:** Better educated people have lower morbidity rates from the most common acute and chronic diseases, independent of basic demographics and labor market factors. There is a strong correlation among adults twenty-five years and older for whom poverty status is determined by educational attainment level. Those with higher levels of education are more likely to have higher household incomes.

### **Tobacco and Obesity-Related Chronic Disease Burden**

**Description:** Tobacco and obesity-related chronic disease burden is an overall measure of the percentage of Oregonians who have had at least one of the following chronic diseases: arthritis, asthma, cancer, diabetes, or heart disease. This information comes from the BRFSS survey of adults eighteen years of age or older.

**Rationale:** Chronic diseases such as arthritis, asthma, diabetes, cancer, and heart disease are the leading causes of death and disability in the United States. The CDC states that chronic diseases account for 70% of all deaths in the U.S., which is 1.7 million each year. These diseases also cause major limitations in daily living for almost 1 out of 10 Americans or about 25 million people.

### **Consumption of Tobacco, Alcohol, and Sugar-Sweetened Beverages**

**Description:** Oregon currently has data from the Oregon Department of Revenue and the Oregon Liquor Control Commission on excise taxes collected from the purchase of tobacco and alcohol. Excise tax data are not available by county but consumption can be calculated on a per-capita basis at the state level. There is currently no excise tax on sugar-sweetened beverages.

**Rationale:** The combination of local, state, and federal taxes is one means to increase the price of tobacco and alcoholic beverages, and thus discourage their consumption. Increased taxes could lower consumption, reduce health problems, and save medical costs. At least a dozen states already have some type of taxes on sugary beverages.

### **Tobacco Use**

**Description:** Cigarette smoking is the currently available measure for tobacco use. Cigarette smoking is a measure of percent of the population that currently smokes. The data comes from the BRFSS for adults over eighteen years or older and from the OHT for children in the 8<sup>th</sup> and 11<sup>th</sup> grade.

**Rationale:** Measuring tobacco use helps track improvements in overall population health and chronic disease prevention and highlight gaps among disadvantaged populations.

### **Obesity (BMI)**

**Description:** The common method for measuring obesity is the use of the Body Mass Index (BMI). The BMI is a statistical measurement derived from height and weight. Adults are considered obese if their BMI is 30 or over. Calculating BMI in children is more difficult. After BMI is calculated for children and teens, the BMI number is plotted on the CDC BMI-for-age growth charts (for either girls or boys) to obtain a percentile ranking. A child is considered obese if their percentile range is equal to or greater than the 95<sup>th</sup> percentile.

The data comes from the BRFSS for adults over eighteen years or older and from the OHT for children in the 8<sup>th</sup> and 11<sup>th</sup> grade. Data for children on WIC comes from the Pediatric Nutrition Surveillance System (PedNSS). PedNSS is a child-based public health surveillance system that describes the nutritional status of low-income U.S. children who attend federally-funded maternal and child health and nutrition programs.

**Rationale:** Using BMI to measure overweight and obesity is the national measure used by the CDC and all states.

### **Soda/Sugar Sweetened Beverages**

**Description:** The data comes from the BRFSS for adults eighteen years or older and from the OHT for children in the 8<sup>th</sup> and 11<sup>th</sup> grade. Data for two year olds in Oregon comes from the Pregnancy Risk Assessment Monitoring System (PRAMS-2).

**Rationale:** Soda consumption is a thought to be a significant contributor to child and adult obesity because of added sugar content and empty calories. In their landmark study, *Bubbling Over: Soda Consumption and Its Link to Obesity in California*, researchers from the UCLA Center for Health Policy Research (CHPR) and the California Center for Public Health Advocacy (CCPHA) discovered a strong correlation between soda consumption and weight. Based upon data from more than 40,000 interviews conducted by the California Health Interview Surveys (CHIS), researchers found that adults who drink a soda or more per day are 27 percent more likely to be overweight than those who do not drink sodas, regardless of income or ethnicity. Research shows that over the last 30 years Americans consumed 278 more calories per day even as physical activity levels remained relatively unchanged. One of the biggest changes in diet during that period was the enormous increase in soda consumption, accounting for as much as 43 percent of all new calories.

### **Physical Activity Meeting CDC Recommendations**

**Description:** The data for meeting physical activity meeting comes from the BRFSS for adults eighteen years or older and from the OHT for children in the 8<sup>th</sup> and 11<sup>th</sup> grade.

The current recommendations for adults are:

- 150 minutes of moderate-intensity aerobic activity every week and two or more days a week of muscle strengthening activities **OR**
- 75 minutes of vigorous-intensity aerobic activity and two or more days a week of muscle strengthening activates **OR**
- An equivalent mix of moderate- and vigorous intensity aerobic activity and two or more days a week of muscle strengthening activates

The current recommendation for children is 60 or more minutes of physical activity each day. This includes:

- Vigorous-intensity aerobic activity on at least 3 days per week **AND**
- At least three days a week of muscle strengthening **AND**
- At least three days a week of bone strengthening activities (jumping rope or running)

**Rationale:** This is the national measure used by the CDC and all states.

### **Heavy Drinking**

**Description:** For men, heavy drinking is defined as consuming an average of more than two drinks per day. For women, heavy drinking is defined as consuming an average of more than one drink per day. The data comes from the BRFSS for adults eighteen years or older and from the OHT and the OSWS for children in the 8<sup>th</sup> and 11<sup>th</sup> grade. Youth question asked “*During the past 30 days, on how many days did you have at least one drink of alcohol?*”

**Rationale:** This is the national measure used by the CDC and all states.

### **Participation in Evidence-Based Chronic Disease Self-Management Programs**

**Description:** Participation in evidence-based chronic disease self-management programs is measured using the number of individuals participating in the Oregon *Living Well with Chronic Conditions* initiative. *Living Well with Chronic Conditions* is a six-week workshop that provides tools for living a healthy life with chronic health conditions, including diabetes, arthritis, asthma and heart disease. Through weekly sessions, the workshop

provides support for continuing normal daily activities and dealing with the emotions that chronic conditions may bring about.

**Rationale:** Subjects who attend workshops, when compared to those who did not, demonstrated significant improvements in exercise, cognitive symptom management, communication with physicians, self-reported general health, health distress, fatigue, disability, and social/role activities limitations. They also spent fewer days in the hospital, and there is a trend toward fewer outpatient visits and hospitalizations. The cost to savings ratio is estimated at approximately 1:10. Many of these results persist for as long as three years.

### **Health Collaborative Established and Tracking Health Outcomes**

**Description:** A community health collaborative is broadly focused, bringing together diverse stakeholders. Community Health Collaboratives enlist a range of activities to increase access for low-income and vulnerable community members, coordinate care across the healthcare delivery system, and promote strategies that improve community health and well-being. Currently this information is not available for Oregon.

**Rationale:** Tracking health collaborative will measure:

- Communities working together to improve health
- Community response to improve access
- Leveraging of community resources
- Enhancing chronic disease prevention and management

### **Community Health Assessment Done in Collaboration with Local Health Departments and Hospitals**

**Description:** Currently this information is not available for Oregon.

**Rationale:** The federal Accountable Care Act requires that nonprofit community hospitals conduct a Community Health Assessment every three years in collaboration with public health agencies.

### **State/Local Health Departments Applying for Accreditation**

**Description:** Currently this information is not available for Oregon. Accreditation includes assessment, a quality improvement plans, and a health improvement plan.

**Rationale:** In order to improve the health of the public, the Public Health Accreditation Board (PHAB) is developing a national voluntary accreditation program for state, local, territorial, and tribal public health departments. The goal of the accreditation program is

to improve and protect the health of every community by advancing the quality and performance of public health departments. It is expected that all state and local health departments will need to be accredited using a nationally consistent tool.

**Hospital Readmissions**

**Description:** The Incentives and Outcomes Report will provide the specific measure.

**Rationale:** Avoidable hospital readmissions are a matter of concern due to their implications for both cost and quality of hospital care, and additional burden for patients and families. Study of hospital readmission patterns can also guide interventions in disease prevention and management, such as readmission of patients with heart failure.

**Preventable Hospital Admissions**

**Description:** The Incentives and Outcomes Metrics Report will provide the specific measure.

**Rationale:** Hospitalizations that can be prevented with high quality primary and preventive care may be avoided if clinicians effectively diagnose, treat, and educate patients, and if patients actively participate in their care and adopt healthy lifestyle behaviors. Thus, higher rates of "preventable hospitalizations" may pinpoint areas in which potential improvements can be made in the quality of the health care system.

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

---

**Outcome and Effectiveness able for of HIP Plan Actions (Reviewed by HIP Committee October 8, 2010)**

<b>Outcome</b>	<b>Action</b>	<b>Effectiveness</b>	<b>Scope of Investment/ROI</b>	<b>Data for Tracking</b>
<b>Increase high school graduation rates and college degrees (Goal I)</b>	Support passage of a "Healthy Schools Act" establishing accountable student health measures See p 12 of this table	Evidence-based: Coordinated School Health is the school health framework recommended by the CDC that is used widely in the US and other nations.  Research from the neurosciences, child development and public health provide compelling evidence for the role that health disparities play in the achievement gap. High quality, strategically planned, and effectively coordinated school health programs and policies are needed to address these health issues. (From: Basch, CE (2010). Healthier students are better learners: a missing link in school reforms to close the achievement gap. Teachers College, Columbia University Equity Matters Research Review 6.)		Oregon Healthy Teens Survey (OHT), School Health Profile (SHP)
	Incorporate health improvement of students and staff as a component of School Improvement Plans			OHT, SHP
	Expand funding for and access to Head Start, Early Head Start and Migrant Head Start	Evidence-based: See pp 13-14 of this table	See pp 13-14 of this table	ODE, OHA
	Provide stable housing by prioritizing existing resources to build new, affordable housing	Evidence-based: CG recommends tenant-based rental assistance programs; insufficient evidence for mixed income housing		

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
		developments.		
	Require Health Impact Assessments and plans to remediate identified health impacts for building and transportation in geographic proximity to school sites.	Promising Practice: ASTHO recommends the use of HIA as a process tool for determining potential public health impacts of policies, plans, or projects. HIA can provide recommendations to increase positive health outcomes and minimize adverse health outcomes.		
<b>Reduce obesity in children and adults (Goal II)</b>	Evidence based obesity prevention education and weight management health insurance benefit for DMAP clients, as well as PEBB and OEBC	Evidence-based: CG recommends worksite programs intended to improve diet and physical activity behaviors based on strong evidence of their effectiveness for reducing weight among employees.	For evidence-based weight management benefit: OEBC estimated costs: \$2.4 mil/yr PEBB actual costs 2009: \$1.4 mil. PEBB member enrollment 2009: 7316 PEBB ROI estimate 2009: over \$2 million in health care cost savings. DMAP benefit/cost?	PEBB, OEBC, DMAP data
	<i>Discourage the consumption of sugar-sweetened beverages:</i> Eliminate the sale of sugar-sweetened beverages in cafeteria, stores, and vending machines	Promising Practice: CDC recommends policies that restrict the availability of sugar-sweetened beverages and discourage consumption among adults and children.	No cost to implement	Statewide Employer Survey, OHT, BRFSS
	<i>Discourage the consumption of sugar-sweetened beverages:</i> Raise the price of sugar-sweetened beverages by	Promising Practice: CDC recommends policies that discourage consumption of sugar-sweetened beverages. Raising the price of sugar-sweetened	FY 11-13 revenue: \$161 million Proposed use of revenue: • \$22million-Comprehensive obesity reduction efforts	

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
	establishing a \$0.005 per ounce tax	beverages by 10% is projected to reduce sugar-sweetened beverage consumption by over 12 %. (USDA)	<ul style="list-style-type: none"> <li>Additional considerations: physical education in schools, farm to school, and monitoring nutrition standards in schools</li> </ul>	
	Require that foods and beverages in cafeterias, stores and vending machines meet nutrition standards	Promising Practice: CDC and the IOM recommend public service venues (Schools, government buildings) should provide an environment conducive to healthful eating and drinking behaviors.	<p>Evidence with vending machines indicates that this is a budget neutral action.</p> <p>There are likely upfront infrastructure and capacity costs for cafeterias and cafes and possible continuous costs based on the scope of the population (employees, clients, etc.)</p>	Statewide Employer Survey , OHT, BRFSS
	Expand Farm to School and School Gardens and Nutrition Program	Promising Practice: CDC recommends increasing opportunities for people to purchase foods from farms. Farm to school is one kind of initiative recommended.	Implementing a farm to school program costs \$22 million dollars. For every dollar spent by schools on produce from Oregon farms, there is an additional \$.86 put back into the economy. A sugar-sweetened beverage tax is a possible resource.	ODE, ODAgriculture
	Supplement the current federal SNAP (Supplemental Nutrition Assistance - food stamp - program) with state funds	Promising Practice: CDC recommends that local governments can improve the affordability of healthier foods and beverages by making foods more affordable including offering coupons or vouchers redeemable for healthier foods and incentives or bonuses for the purchase of healthier foods.	<p>Investments may vary. NY provided two additional dollars per \$5 spent at farmers markets per family. The additional money was only for farmers markets.</p> <p>A 10% subsidy would increase fruit and vegetable consumption by 2.1%-5.2% among low income individuals. (USDA)</p>	DHS
	Fund a Healthy Food Financing Initiative	Promising Practice: CDC recommends local governments offer financial and non-financial incentives to food retailers to open	Up front costs will vary based on which financial incentive is used. Tax breaks or credits will result in revenue loss, and grants and	

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
		new stores or offer healthier food and beverage choices in areas with few healthy food options.	loans need upfront investments. Nonfinancial incentives could include supportive zoning, negotiation assistance, and capacity building for small businesses that want to initiate the sale of healthier foods and beverages.	
	Reduce the sodium intake of Oregonians by decreasing the sodium in packaged and restaurant foods produced in Oregon by 25% over five years	Promising Practice: A 2010 NEJM article projects reducing salt intake by 3 grams per day would prevent 44,000-92,000 deaths annually and substantially decrease rates of cardiovascular events in all populations across the United States.	No additional cost to state government to implement voluntary efforts. This reduction could save Oregon an estimated \$110-260 million annually.	
	Promote and support active transportation options for employees and students	Promising Practice: CDC recommends improving access to sidewalks, bike lanes, trails and public transportation to increase physical activity and physical fitness among adults and students.	Cost for reduced or free public transportation passes  In 2009 Oregon received \$1.9 million dollars from the federal government to support Safe Routes to School.	Statewide Employer Survey, SHP, OHT, BRFS
	Promote and support physical activity throughout the work and school day for employees and students	Evidence-based: CG recommends worksites increase physical activity of employees through onsite fitness clubs, bike racks, showers, club memberships, walking groups and other social supports.  CG recommends increasing levels of physical education and recess in schools to increase students' level of physical activity and improve physical fitness.	Cost to employers will range based on intervention selected.  The cost to implement PE in every school in Oregon is \$50 million. Revenue from a sugar-sweetened beverage tax could be allocated for this purpose. No additional cost for recess.	Statewide Employer Survey – PHD, SHP, OHT, BRFS

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

<b>Outcome</b>	<b>Action</b>	<b>Effectiveness</b>	<b>Scope of Investment/ROI</b>	<b>Data for Tracking</b>
	Supplement federal funding with state highway funds dedicated to bicycle and pedestrian facilities	CDC recommends local governments use policy to shape, develop and maintain a bike and pedestrian infrastructure for residents.	Increase state highway funds allocation from 1% to 2%. Increase grant amount to cities from \$5 million to \$10 million every two years.	ODOT
<b>Reduce tobacco use and exposure (Goal II)</b>	Adopt and implement tobacco-free campus policies	Evidence-based: CG recommends smoking bans and restrictions whether used alone or as part of a multi-component community or workplace intervention based on strong evidence of effectiveness in reducing exposure to second hand tobacco smoke.	Local tobacco prevention and education programs are funded as part of a comprehensive statewide tobacco prevention and education program with tobacco tax revenue.	Statewide Employer Survey, SHP, OHT, BRFS, BSSE
	Adopt and implement smoke-free policies for all public multiunit-housing settings	Evidence-based: CG recommends smoking bans and restrictions whether used alone or as part of a multi-component community or workplace intervention based on strong evidence of effectiveness in reducing exposure to second hand tobacco smoke. The Surgeon General recommends the adoption of private and public policies that prevent secondhand smoke exposure in multi-unit housing because secondhand smoke can seep from one unit to another.	Minimal costs associated with the adoption of no-smoking rules in public housing include posting no-smoking signage, revising rental agreement forms, and training property managers on policy communication and enforcement.  Cost savings are realized by housing managers due to reduced property damage and fire risk.	Policy Adoption Tracker maintained by Health In Sight, LLC  BRFS
	Assure that evidence-based tobacco cessation health insurance benefits are available and promoted to DMAP clients, PEBB and OEBB	Evidence-based: CG recommends reducing patient out of pocket costs for effective tobacco cessation therapies based on sufficient evidence in increasing use of the therapy and increasing the number of clients who quit.	PEBB Costs 2009: \$300,960 PEBB enrollment 2009: 776 DMAP Allocation for the QL (Fee for Service only): \$230,000/biennium  DMAP managed care (80% of the population) benefit is included in	Quit Line Reports

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
			per member / per month cost. American Lung Association Report ROI (2010): For every \$1 toward tobacco cessation Oregon's average ROI is \$1.32	
<b>Reduce tobacco use and exposure (Goal II) (continued)</b>	Raise the price of tobacco by increasing the cigarette tax by \$1	Evidence-based: CG recommends increasing the unit price of tobacco products based on strong evidence of effectiveness in reducing population consumption of tobacco, reducing initiation of tobacco and increasing tobacco cessation.  A \$1 tobacco excise tax increase will drive down tobacco consumption – an estimated 8 percent in the first biennium.	FY 11-13 revenue: \$218 million Proposed use of revenue: <ul style="list-style-type: none"> <li>• \$53.42 million additional resources for a Comprehensive tobacco prevention and education efforts</li> <li>• \$164 million additional resources for the Oregon Health Plan</li> </ul>	Policy in place, and revenue allocated
	Ban free sampling of tobacco products	There is insufficient evidence that this approach works when implemented alone.  Evidence-based: CG recommends community mobilization combined with other interventions such as stronger local laws directed at retailers, enforcement of retail laws, and retailer education.  Note: Under the new FDA Family Smoking Prevention and Tobacco Act- the sampling of cigarettes is prohibited. Local governments have the authority to ban other tobacco products.	Local tobacco prevention and education programs are funded as part of a comprehensive statewide tobacco prevention and education program with tobacco tax revenue.	
	Require tobacco prevention messages at the point of sale	There is insufficient evidence that this approach works when implemented alone.	Local tobacco prevention and education programs are funded as part of a comprehensive	

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
		Evidence-based: CG recommends community mobilization combined with other interventions such as stronger local laws directed at retailers, enforcement of retail laws, and retailer education.	statewide tobacco prevention and education program with tobacco tax revenue.  Cost is born by the business. Recommended that any law requiring the posting of point-of-sale tobacco prevention messages also require the tobacco retailer to bear the cost of printing the signs.	
<b>Reduce tobacco use and exposure (Goal II)</b> <b>(continued)</b>	Require tobacco retailers to obtain a license	There is insufficient evidence that this approach works when implemented alone.  Evidence-based: CG recommends community mobilization combined with other interventions such as stronger local laws directed at retailers, enforcement of retail laws, and retailer education.	Local tobacco prevention and education programs are funded as part of a comprehensive statewide tobacco prevention and education program with tobacco tax revenue. Tobacco retailer licensing fees can be set high enough to sustain a monitoring and enforcement program.	
	Require that tobacco education and cessation materials be given "equal time" in tobacco retail stores	Evidence-based: CG recommends health communication interventions be part of a mass media campaign. Mass media campaigns need to be used in combination with price increases and community based programs.	A media campaign would be funded as part of a comprehensive tobacco prevention and education program with tobacco tax revenue.	
<b>Reduce alcohol abuse (Goal II)</b>	Raise the price of beer by raising the current 8 cents per gallon tax to 16 cents	Evidence-based: CG recommends raising the price of alcohol including beer, wine and spirits.  HB 246 (2009-11) was to establish an Alcohol Remediation Fund, for alcohol and substance abuse prevention, treatment and recovery	HB2461 (2009-11) proposed increase on malt beverage (beer) tax from \$2.60/barrel to \$49.61, for an additional 2-year maximum tax revenue of \$321,936,450.	OLCC  Reliable revenue impact is driven by manufacturer/distributor response and consumer reaction.

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
	Implement a target media campaign and evidence-based alcohol abuse prevention interventions towards high risk and vulnerable populations	<p>funds through a malt beverage tax.</p> <p>A comprehensive evidence-based approach is needed. Currently, substance abuse efforts include both alcohol and drug prevention and treatment.</p> <p>SB 267, passed by the Oregon Legislature in 2003 requires state agencies to adopt evidence-based practices for substance abuse treatment and prevention. In Oregon, Policy Option Packages have focused on underage drinking and parenting programs.</p>	Estimates of a comprehensive substance abuse program: \$2 spent results in \$28 saved (Alcohol and Drug Policy Commission Report, May 1, 2010)	A goal for reform includes uniform guidelines to collect and analyze data across state agencies and in conjunction with local governments and providers.
<b>Implementation of integrate and coordinated community based initiatives (Goal III)</b>	Coordinate funding and programs to establish systemic integration	Promising Practice: Improve care coordination between medical home and social services. (Models= Building Better Care, CHW Programs). Identify community based health priorities using a consistent model.	CHW that bridges community public health and social service network.	
	Collaborate with local hospitals to conduct community health assessments	Federal Legislation: Identify community based health priorities using a consistent model.	<p>Leadership training for state and local public health.</p> <p>10% of local health administrators time to work with local hospitals.</p> <p>Access to data and regional public health epidemiologists.</p>	
	Create regional “health collaboratives	Promising Practice: Improve health planning and health improvement strategies in geographic areas that share hospital and health care systems, transportation corridors,	Identify self-selecting regional geographic areas and invest in regional planning through a facilitated process convening local health and social service. Modeled on cost of Community	Community assessments performed using an established model (MAPP, PACE,

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
		similar outcomes.	Listening Sessions.	CHANGE).
<b>Implementation of integrate and coordinated community based initiatives (Goal III) (continued)</b>	Establish adequate data systems to track and are responsible for local policy	Core public health function: Local and regional public health data drives local priorities and targeted investments that improve measurable outcomes.	(PHD needs to identify this cost from CDC grant application).	Current county and regional chronic disease data exist and are available for local policy decisions. <i>These data also available for other actions.</i>
	Increase public health capacity statewide through accreditation	Accreditation provides national performance standards: Consistently meet national public health performance standards leading to evidence based community practice that improves overall population health.	Technical assistance and direct funding to LHD's to participate in accreditation readiness with a focus on Community Assessment, development of a strategic plan, and Quality Improvement, \$500,000.	Community assessments and resultant strategic plans performed using an established model (MAPP, PACE, CHANGE).
	Assure that data systems support collection and analysis of population health improvement measures	Core public health function		
	Establish pilots to develop, test, and evaluate "community health team" models	Would need to be evaluated for effectiveness.	TBD	
	Require that pilot programs and funding be targeted to populations that are the most vulnerable and have greatest disparities	To achieve health equity	TBD	
	Establish a mechanism to measure savings resulting from chronic disease prevention	Would need to be evaluated for effectiveness.	TBD	

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
	benefits and redirect savings			
<b>Implementation of integrate and coordinated community based initiatives (Goal III) (continued)</b>	Bring to scale programs that demonstrate improved health outcomes through successful coordination, navigation, integration and evaluation	Based on evaluation of pilots	TBD	
	Make evidence-based chronic disease self-management widely available in communities and reimbursed by OHA for DMAP clients, PEBB and OEBC members	Evidence-based: The Stanford Chronic Disease Self-Management Program (Living Well in Oregon) is evidence-based resulting in increased self-efficacy and lower use of high-cost health care services.	Reimbursement by OHA of \$750,000 (\$375/participant for 2000 people) would support the availability of Living Well workshops across the state. Potential ROI would include 280 avoided ED visits (saving \$317,000) and 1390 avoided hospital days (saving \$3.25 million).	Living Well database
	Make evidence-based group exercise and falls prevention programs widely available and affordable in all counties and tribal communities	Evidence-based: The Tai Chi exercise program is a community-based exercise program that has been shown to improve physical functioning and reduce the risk of falls by as much as 55%.	To develop a statewide infrastructure for the Tai Chi Program would need an initial 3-year investment of \$300,000.  Over 50% of fall hospitalizations involve a hip fracture. Annual hospitalization cost for senior falls was \$134 million in 2007. There are additional costs for entry into long-term care associated with fall injury. 60% of Oregon seniors hospitalized for a fall are discharged into long-term care – about 3265 seniors a year. Many of these persons never leave long-term care.	

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

---

Outcome	Action	Effectiveness	Scope of Investment/ROI	Data for Tracking
	Provide reimbursement for evidence-based home-based multi-trigger multi-component interventions with an environmental focus for people with asthma.	Evidence-based: The CG recommends this evidence-based approach that improves asthma symptoms and reduces the number of school days missed.	What is the request for OHA investment?  The Community Guide identifies good value for the resources invested with a benefit-cost ratio of 5.3 to 14.0.	

Legend of Acronyms:

ASTHO      Association of State and Territorial Health Officials  
 CDC        Centers for Disease Control and Prevention  
 CG         Community Guide to Preventive Services  
 IOM        Institute of Medicine

### **Healthy Schools Act Background**

The concept of a Healthy Schools Act for Oregon first emerged as a recommendation in the report to the 2009 Oregon Legislature from the HB 3486 Advisory Committee, “Reversing the trends of obesity and diabetes”, Strategic Plan to Slow the Rate of Diabetes in Oregon, October 2008. As a result of the work of that advisory committee, it became apparent that a significant subset of policy and strategies designed to improve nutrition and physical activity for school-aged youth focused on the school-community environment. The SB 931: Task Force for a Comprehensive Obesity Prevention Initiative 2009 reiterated the importance of such a framework with the following recommendation:

*“Require that the Department of Human Services and the Department of Education to collaborate on the development of a Healthy Schools Act. . . .”*

The scope of these two recommendations encompassed a wide range of policies and actions that would address obesity and diabetes, including physical education, nutrition standards, and improvements in planning and developments of the built environment to support healthy activities and alternatives.

During the last year the concept of a ‘Healthy Schools Act’ contained in the aforementioned reports was independently explored by the Public Health Division and some community based organizations (e.g. Community Health Partnership). Public Health determined that over 20 states have passed, attempted to pass or have legislation in process that has elements of a Healthy School Act. The most common denominator of these efforts is a statutory requirement for some type of school health advisory council at the school or district level. The concept of a School Health Advisory Council (SHAC) is based on CDC’s eight component Coordinated School Health model which provides a structure and process to address school health in a comprehensive way. This model integrates policy, planning and programming for a wide range of school wellness and health issues, for example; nutrition, physical activity, tobacco, safety, school nursing, mental health and asthma.

Oregon Public Health Institute outlined their initial thinking of what might be included within an Oregon Healthy Schools/Healthy Students Bill (a.k.a. Healthy Schools Act) and introduced it to the Public Health Advisory Workgroup in June 2010. Two meetings have been held with the executive director of Community Health Partnership to share information and discuss the potential feasibility of organizing a working group to advance the concept of an Oregon Healthy Schools Act. As a result of these meetings, additional partners were identified including representation from Children First for Oregon, Healthy Kids Learn Better Coalition, Oregon School Boards Association, Oregon Department of Education, and the Oregon Educators Association. A meeting is scheduled in October with representatives from these groups to determine strength of interest, scope, and next steps.

It is important to emphasize that the Healthy Schools Act is still in the conceptual stage. It is moving in the direction of being a vehicle to move school health forward in Oregon in support of advancing educational achievement. The act would create the expectation for health and education partners to work together in creating policies and identifying strategies around school health improvement and could include, for example, requiring that health is considered and embedded in school improvement efforts and performance measurement and developing resources for the funding of evidence-based strategies to improve identified health status indicators for the school community.

**Expand funding for and access to Oregon Pre-K, Early Head Start, and Migrant Head Start**

**Program Description**

The **Oregon Pre-Kindergarten Program (OPK)** is a federal/state partnership which supports a collaborative federal Head Start and state prekindergarten system providing comprehensive child development and education services to at-risk 3 and 4 year olds from low-income families. Priority is given to families whose incomes are below 100% of the Federal Poverty Level. Programs participating must meet research-based, federal Head Start Performance Standards. Core services include developmental and health screening and children are connected to a source of health care.

State funding – biennium - \$110 million

State funding per child enrolled in 2009 \$8020 (6168 children)

**Early Head Start** is a program that begins prenatally and spans the years from birth to age-3. It is primarily funded with federal dollars, but received state funding for the first time in 2010. Largely a home-based program, the intent is to promote healthy prenatal outcomes, enhance development, healthy family functioning, and parent-child bonding. Programs participating must meet research-based, federal Head Start Performance Standards.

American Indian and Alaskan Native Head Start are funded separately from OPK programs and federal funds for Head Start in Oregon include those targeted for Migrant/Seasonal programs as well. State general funds for the biennium total \$110 million for Head Start and \$1 million for Early Head Start.

**Numbers Served/Gaps**

Oregon Pre-Kindergarten Program

3 and 4 year olds eligible – 17,894

Number served – 13,229 (74%)

Unserved – 4,665 (26%)

Projected additional cost to fill gap -  $\$8020 \times 4,665 = \$37,413,300$

**Early Head Start**

Children eligible (prenatally – age 3) – 29,367

Number served – 1,674 (5.7%)

Unserved – 28,574 (97.3%)

State funding biennium - \$1 million

Average cost per child varies from \$11,000 to \$15,000 depending on program

Projected additional cost to fill gap -  $\$13,000 \times 28,574 = \$371,462,000$

**Rationale** – Research shows high-quality preschool yields returns ranging from \$2 to \$17 for every dollar spent. The Perry Preschool study calculated the rate of return on early childhood education as much as \$16 per dollar invested in increased wages, more taxes paid, less use of welfare, medical programs, and less involvement in the criminal justice system. (*Schweinhart, Lawrence; How to Take the High Scope/Perry Preschool to Scale*). It must be noted that a targeted program for at-risk children has been shown to have a higher benefit/cost ratio.

Benefits that have been included in benefit-cost analyses.

- K-12 education savings (e.g., reduced remedial and special education services)

- Increased earnings (both parents and participants)
- Increased income tax revenues stemming from higher participant and/or parent earnings
- Savings to public assistance programs (administrative costs and payments)
- Savings to criminal justice systems
- Tangible savings to crime victims (e.g., health costs and property damage)
- Intangible savings to crime victims (e.g., pain and suffering)
- Savings to victims of child abuse or neglect
- Savings from lower child-welfare costs (from fewer cases of abuse or neglect)
- Savings to health care systems
- Child care savings to parents

*Dollars and Sense: A Review of Economic Analyses of Pre-K – Albert Wat, Pre-K] Now, May 2007*

**Health Improvement Plan Recommendations  
Cost Analysis Table**

**Goal I: Achieve health equity and population health by improving social, economic and environmental factors.**

	Recommended investment for 2011-2020	Benefit from full investment	Cost of no investment
<b>Target resources to improve child and student health (birth through higher education) to support improved educational outcomes.</b>	<b>\$3 billion over 10 years</b>	<b>More than \$16 billion</b>	<b>More than \$3 billion</b>
	\$17 million per year (for 10 years) to implement Coordinated School Health in Oregon School Districts. \$37 million per year (for 7 years) to expand the Oregon Pre-Kindergarten Program to cover all eligible 3- and 4-year-olds. \$371 million per year (for 7 years) to expand Early Head Start to cover all eligible children (prenatal through 3 years of age).	Studies have found a 5.4:1 ROI for investment in Coordinated School Health, and ROI as high as 16:1 for investment in early childhood education. Benefits seen are increased wages, more taxes paid, reduced need for welfare and medical assistance programs, and lower crime rates. For an ROI of 5.4:1, the benefit of a \$3 billion investment over 10 years would be over \$16 billion. ( <a href="http://healthyamericans.org/reports/prevention08/Prevention08.pdf">http://healthyamericans.org/reports/prevention08/Prevention08.pdf</a> ).	Approximately \$173 million dollars in tax revenue is lost each year due to the decreased earnings of individuals that did not earn a diploma in high school (Cascade Policy Institute March 2010) Oregon spends more than \$200 million providing Medicaid services to people who did not graduate high school (Cascade Policy Institute March 2010).

**FINAL Oregon Health Improvement Plan: 2011 - 2020**

**Goal 2: Prevent chronic diseases by reducing obesity prevalence, tobacco use, and alcohol abuse.**

	Recommended investment for 2011-2020	Benefit from full investment	Cost of no investment
<b>Reduce obesity in children and adults</b>	<b>\$176 million over 10 years</b>	<b>More than \$1.18 billion</b>	<b>\$14 billion</b>
	Invest revenue from a tax on sugar-sweetened beverages. \$22 million per biennium for 2011-2013, \$44 million per biennium for 2013-2015, 2015-2017, 2017-2019, 2019-2020	Public health programs have been successful at reducing the prevalence of tobacco use by adults in Oregon by 22% in 10 years. A fully funded obesity prevention program that achieved similar success in preventing diabetes would save at least \$215 million a year in medical costs by 2020. Savings from diabetes reduction alone from 2011-2020 would total \$1.18 billion, a return on investment of over 6:1. Savings relating to diabetes are just one component of the total benefit from reducing obesity rates, so this estimate is conservative.	Costs in Oregon for treating diabetes are \$1.4 billion/year. If rates remain unchanged, the costs of treating diabetes in Oregon will total at least \$14 billion over the next 10 years.
<b>Reduce tobacco use and exposure</b>	<b>\$180 million over 10 years</b>	<b>More than \$900 million</b>	<b>\$20 billion</b>
	Invest revenue from an increase in the tobacco excise tax. \$40 million per biennium for 2011-2013, 2013-2015, 2015-2017, 2017-2019, 2019-2020	An extensive evidence base documents the benefits from investment in comprehensive tobacco control programs. Public health programs have been successful at reducing the prevalence of tobacco use by adults in Oregon by 22% in 10 years. The Public Health Advisory Board estimated conservatively that every dollar invested in tobacco control in Oregon will produce over \$5 in benefits. Over the next 10 years, an investment of \$190 million would save at least \$900 million.	Tobacco use in Oregon costs over \$2 billion a year in medical costs and loss of productivity due to premature death and disease. If rates remain unchanged, tobacco will cost at least \$20 billion over the next 10 years.
<b>Reduce alcohol abuse by adults and alcohol use in youth</b>		There are extensive research studies showing both a reduction in heavy and binge drinking as well as societal costs around increasing cost and/or taxes on alcohol sales.	Costs in Oregon for alcohol related abuse and/or dependency in 2006 was \$3.24 billion and for each year from 2011 forward taking into account adjustment from 2006 costs to 2011 inflation rates is \$3.59 billion for a total of \$38.82 billion over 10 years.

**Health Improvement Plan Recommendations  
Cost Analysis Table**

**Goal 3: Stimulate public health, community, and health system linkages, innovation and integration that increase coordination and reduce duplication.**

	Recommended investment for 2011-2020	Benefit from full investment	Cost if we do nothing
<b>Increase the effectiveness and efficiency of Oregon’s public health system</b>	<b>See Goal 2</b>	<b>See Goal 2</b>	<b>See Goal 2</b>
	Many of the enhancements to the public health system can take place as tobacco and sugar sweetened beverage tax revenues are invested in comprehensive public health programs. These programs fund data systems, community assessments, and program planning, all recommended actions under Goal 3. Investment amounts and ROI for these investments are described in Goal 2.	Evidence shows successful public health programs to reduce tobacco and obesity will direct the majority of their resources to fund local programs in communities, through the state public health system. Strengthening this system through continued investment is necessary in order to deliver evidence-based, comprehensive programs to reduce chronic diseases. Return on investment for tobacco and obesity prevention is described in Goal 2.	Without investment in the public health system, Oregon will be unable to deliver evidence-based chronic disease prevention programs.
<b>Establish and fund systemic integration between patient-centered medical care homes and community-based public health and social services resources to support chronic disease prevention and management.</b>	<b>\$7.5 million over 10 years</b>	<b>More than \$35 million</b>	<b>More than \$35 million</b>
	\$750,000 per biennium to reimburse 2,000 participants in Living Well	Anticipated ROI per 2,000 participants includes 280 avoided ED visits (saving \$317,000) and 1390 avoided hospital days (saving \$3.25 million) each year. Total savings over 10 years from a \$7.5 million investment would be over \$35 million.	Without the investment in reimbursement for Living Well, these \$35 million in costs will be borne by Oregon's health care system.

**FINAL Oregon Health Improvement Plan: 2011 - 2020**

---

**Goal 1: Achieve health equity and population health by improving social, economic and environmental factors.**

2011	2012 - 2014	2015 - 2020
Maintain funding for access and participation in early childhood education	Expand funding for access/participation in early childhood education	
Pass legislation requiring schools/districts to assess/address health barriers to learning	Target resources for affordable housing to families with incomes <30% of median income	
Support partnerships with organizations focused on health improvement of students and staff		
Inventory, expand and improve K-12/college programs aimed at diversifying the health and health-care workforce		
	Support organizations to improve educational attainment among children	
	Support Health Impact Assessments for building or transportation projects near schools	
	Improve prompt access to mental health services for school children and youth	
Strategy: Target resources to improve child and student health (birth through higher education) to support improved educational outcomes.		

**FINAL Oregon Health Improvement Plan: 2011 - 2020**

**Goal 2: Prevent chronic diseases by reducing obesity, tobacco use and alcohol abuse.**

2011	2012 - 2014	2015 - 2020
Fund Farm to School, School Gardens, and Nutrition Programs through lottery funds	Expand adoption of nutrition standards for foods available in local agencies and other community settings	Supplement federal food stamp program (SNAP) with state funds and provide incentives for healthful food purchases
Adopt/implement nutrition standards for foods available in state and educational agencies		
Provide weight management health insurance benefit for DMAP clients, PEBB and OEBC members		
Adopt a sugar-sweetened beverage tax		Fund a Healthy Food Financing Initiative
Promote physical activity through work and school day for employees and students		
Adopt and implement public and private workplace policies that promote support for breast-feeding mothers returning to work		
Support legislation to expand the Oregon Highway Trust Fund for active transportation projects	Begin steps to reduce the sodium in packaged and restaurant foods produced in Oregon	
	Expand availability of weight management health insurance benefit in other public and private agencies and organizations	
Reduce consumption and fund comprehensive prevention program with \$1 increase in tobacco excise tax	Promote and support active transportation options for employees and students	
Adopt/implement tobacco-free campus policies in state agencies and additions and mental health facilities		
Adopt/implement smoke-free policies for public multiunit-housing		
Assure effective tobacco cessation benefits are available to all DMAP clients, PEBB and OEBC members		
	Expand implementation of tobacco-free campus policies	
	Continue to increase tobacco excise tax to achieve recommended funding level for	
	Require tobacco retailer licensure	
	Ban sampling and tobacco price reduction strategies	
	Require tobacco prevention messages at the point-of-sale	
	Require tobacco education materials "equal time" in tobacco retail stores	
Decrease consumption by beer excise tax	Increase the excise tax on beer bi-annually	

Strategy: Make healthful food and beverage options widely available, increase physical activity opportunities, and provide evidence-based weight management support.

Strategy: Create tobacco-free environments, prevent initiation of tobacco use, support cessation, and counter pro-tobacco influences.

Strategy: Reduce alcohol abuse by adults and alcohol use in youth.

**FINAL** Oregon Health Improvement Plan: 2011 - 2020

**Goal 3: Stimulate linkages, innovation and integration among public health, health systems and communities to increase coordination and reduce duplication.**

2011	2012 - 2014	2015 - 2020
Coordinate funding and programs to establish systemic integration between primary care homes, public health, mental health and other health and social services		
Collaborate with local organizations and partners to conduct community health assessments and develop local health improvement plans		
Create regional health collaboratives that track and are responsible for local policy, health improvement planning and outcomes		
Ensure state data systems to collect, manage, and analyze public health measures, including health disparities data		
Designate Health Information Technology funding for training health care delivery system staff on racial/ethnic data collection		
	State, county and regional public health departments seek and achieve national accreditation	
	Target local HIP resources for vulnerable and disparate populations	
Make reimbursement for chronic disease self-management interventions available for DMAP clients, and PEBB and OEBB		
Make evidence-based group exercise/falls prevention programs available and affordable throughout Oregon		
	Expand reimburse for evidence-based home-based interventions for people with asthma	
	Establish pilot "community health team" models	
	Expand statewide programs demonstrating improved health outcomes	
	Measure savings resulting from chronic disease efforts and redirect savings to expansion of OHP and funding of proven intervention strategies	

Strategy 1: Increase the effectiveness and efficiency of Oregon's public health system.

Strategy 2: Establish and fund systemic integration between patient-centered medical care homes and community-based public health and social services resources to support chronic disease prevention and management.

**Oregon Health Policy Board (OHPB)  
Oregon Health Improvement Plan Committee Charter  
Approved by OHPB on January 12, 2010**

**I. Authority**

The Oregon Health Policy Board (OHPB), under House Bill 2009, Section 8(1) may establish advisory and technical committees as the Board considers necessary to aid and advise in performance of its functions. The Board establishes the Oregon Health Improvement Plan Committee to recommend to the Board and continually refine uniform, statewide health care quality standards for use by all purchasers of health care, third-party payers, health care providers and consumers. The Committee will be guided by the Triple Aim of improving population health, improving the individual's experience of care and reducing per capita costs. The Committee will also be guided by the Oregon Health Fund Board's final report, "Aim High: Building a Healthy Oregon," (November 2008), particularly in reference to Building Block 4: Stimulate System Innovation and Improvement:

Improve population health by:

- Focusing on wellness, prevention and chronic disease management to improve population health
- Focusing on evidence-based interventions that incorporate policy, systems and environmental approaches to promote population health at the state and community levels.
- Supporting communities in developing local solutions to community health problems
- Supporting development of community-based initiatives to reduce chronic disease in the population

Improve the individual's experience of care by:

- Encouraging individuals to establish personal, continuous relationships with patient-centered health practices, engaging individuals in improving their own health, making it easier for people to access culturally appropriate mental health and physical health services, and improving the quality and safety of care they receive
- Improving access to community-based preventive services to reduce disease risk factors in individuals
- Allowing patients to be more engaged in their own health care

Reduce per capita costs by:

- Allowing health resources to be spent more effectively and efficiently at the local level
- Reducing the utilization of health care services by decreasing chronic disease

This charter shall be reviewed annually to ensure that the work of the committee is aligned with the Oregon Health Policy Board's strategic direction.

**II. Objective**

The committee is chartered to provide leadership, direction and oversight for the development of an Oregon Health Improvement Plan, under the direction of the Oregon Health Policy Board. This plan supports a key OHPB goal to improve the health of all Oregonians by promoting and supporting lifestyle choices that prevent and manage chronic diseases. The plan will outline evidence-based interventions that incorporate policy, systems and environmental approaches to promote population health at the

state and community levels. The plan will emphasize a strategy that links population health to the health care delivery system and communities.

The Committee's purpose is to conduct a strategic planning process that involves public and private sector organizations and individuals and engages policy makers, schools, government, business and community leaders. The result will be a comprehensive, multi-sector, multilevel action plan to improve population health through a decrease in tobacco and obesity and the prevention, early detection and management of chronic diseases such as asthma, arthritis, cancer, diabetes, heart disease and stroke.

### **III. Scope**

The Committee's recommendations will serve as the foundation to develop the statewide health improvement plan. The work of the committee is based on several key factors outlined in HB 2009, the Health Fund Board report (November 2008) and public health practice related to a statewide health improvement plan/program:

1. Population health (or public health), the health care delivery system and communities must work together to promote and support individual and community health for all Oregonians;
2. Create and maintain a bridge between population health and communities as an essential part of improving the health of all Oregonians;
3. Population health, chronic disease prevention, early detection and management is a high priority for the Oregon Health Authority and its divisions;
4. The "plan" will be grounded in culturally and socially appropriate evidence-based primary and secondary prevention interventions to prevent and manage chronic diseases;
5. The plan will be grounded in policy, systems and environmental interventions at the state and community levels;
6. The plan will address the impact of development on population health;
7. A range of community partners, including behavioral health and multicultural stakeholders will be actively engaged in the strategic planning process;
8. The plan will include performance criteria and measurable outcomes to demonstrate improvements in population health status and a reduction of chronic disease risk factors;
9. The plan will include the collection of data related to the social determinants of health (e.g., poverty, employment, disparities) and related economic data;
10. The plan will include strategies to reduce health disparities.

### **IV. Deliverables**

- A. A plan is created and approved by consensus of the committee that will:
  - a. List measurable objectives related to tobacco use, obesity prevention, and chronic disease prevention, early detection and management, including baseline and target metrics;
  - b. Outline metrics that will define health empowerment zones: communities that experience disproportionate disparities in health status and health care;
  - c. Outline metrics that define progress towards these goals;
  - d. Outline an implementation strategy, budget and timeline.
- B. A statewide stakeholder coalition for implementation is identified and selected. The coalition will:
  - a. Have sufficient influence to impact the issue;

- b. Have sufficient reach to impact the issue;
- c. Be representative of geographic and demographic diversity;
- d. Include representation from behavioral health organizations;
- e. Include representation from the Oregon Health Authority's health care purchasers including Medicaid;
- f. Be representative of business, public sector and non-governmental organization wellness and senior leadership teams;
- g. Have official backing and endorsement of the plan from stakeholder organizations.

#### **V. Timeline**

Key milestones include:

- 1. Committee meetings are held regularly, beginning January 2010
- 2. Committee reports to the Oregon Health Authority Board, beginning Spring 2010
- 3. Plan outline completed, February/March 2010
- 4. Stakeholder meeting held, March 2010
- 5. Designated task force groups meet, February/March through September 2010
- 6. Public hearings held around the state for input, Summer 2010
- 7. Finalized health promotion/health improvement plan by September 2010
- 8. Plan released at statewide conference in Fall 2010
- 9. A 2-year operational plan is finalized by June 2011
- 10. A 2-year progress report is completed by Fall 2012

#### **VI. Committee Membership**

The committee will be composed of members with expertise, experience and knowledge in the implementation of a broad range of evidence-based interventions supporting and promoting population health at the state, regional and community levels. Members will also be representative of Oregon's geographic and demographic diversity. Members will be selected through a nomination and application process.

#### **VII. Dependencies**

The Health Improvement Plan Committee will seek information from:

- a. Health Care Workforce Committee
- b. Public Health Advisory Board
- c. Coalition of Local Health Officials
- d. The All-Payer, All-Claims (APAC) data program

The Health Improvement Plan Committee will provide information to:

- a. Health Systems Performance Committee
- b. Public Employers Health Care Purchasers Committee

The Health Improvement Plan Committee will provide draft recommendations for input to:

- a. OHA senior staff
- b. Oregon Health Policy Board

**Staff Resources**

The work outlined above will be supported by:

- Oregon Health Authority Divisions, including Oregon Public Health Division (OPHD)
- An external contractor facilitates the committee and its work and provides technical assistance to task force groups, supported by the Health Promotion and Chronic Disease Prevention (HPCDP) section, Oregon Public Health Division
- Staff support to the committee from OPHD programs, led and coordinated by HPCDP

**Select Committee Resources – Oregon Health Improvement Plan Committee**

**Theoretical Framework**

A Framework for Public Health Action: The Health Impact Pyramid, Frieden, T.R., American Journal of Public Health, April 2010, Vol 100, No. 4

**Socioeconomic Factors**

Governor’s Racial and Ethnic Health Task Force – Final Report, November 2000  
(DHS Office of Multicultural Health) <http://oregon.gov/DHS/ph/omh/tf2000/tf2000.pdf>

**Population Health Measures**

County Health Rankings, 2010 Oregon <http://www.countyhealthrankings.org/oregon>

**Resources for changing the context to make the individual’s default decisions healthy**

SB 931 Oregon Obesity Task Force Report 2009  
<http://www.oregon.gov/DHS/ph/copi/docs/sb931obesitytaskforce2009final.pdf>

HB 3486 Strategic Plan to Slow the Rate of Diabetes in Oregon  
<http://oregon.gov/DHS/ph/diabetes/docs/hb3486/diabstratgicplnsm.pdf>

Best Practices for Comprehensive Tobacco Control Programs  
[http://www.cdc.gov/tobacco/tobacco\\_control\\_programs/stateandcommunity/best\\_practices/pdfs/2007/BestPractices\\_Complete.pdf](http://www.cdc.gov/tobacco/tobacco_control_programs/stateandcommunity/best_practices/pdfs/2007/BestPractices_Complete.pdf)

Living Well with Chronic Conditions – Oregon <http://www.oregon.gov/DHS/ph/livingwell/index.shtml>  
Data report – January 2010 <http://www.oregon.gov/DHS/ph/livingwell/docs/datareport.pdf>

Surgeon General’s Perspective: Self-management programs - one way to promote healthy aging  
<http://www.surgeongeneral.gov/library/publichealthreports/sgp124-4.pdf>

**Other state Health Improvement Plans**

Vermont Blueprint for Health Strategic Plan 2007 (70 pages)  
[http://healthvermont.gov/admin/legislature/documents/Blueprint\\_leg\\_report.pdf](http://healthvermont.gov/admin/legislature/documents/Blueprint_leg_report.pdf)

Creating a Better State of Health: Minnesota Statewide Health Improvement Program, January 2010  
<http://www.health.state.mn.us/healthreform/ship/about/legisreport/shipreport.pdf>

**Articles**

Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates, Finkelstein, E., Trogon, J., Cohen, J., Dietz, W., Health Affairs, July 2009, Vol. 28, No. 5.

The Economic Burden of Diabetes, Dall, Zhang, Chen, Quick, Yand and Fogli, Health Affairs, February 2010, Vol. 29, No. 2.

Workplace Wellness Programs Can Generate Savings, Baicker, Cutler and Song, Health Affairs, February 2010, Vol. 29, No. 2.

Reframing School Dropout as a Public Health Issue, Freudenberg, N., Ruglis, J., Preventing Chronic Disease Public Health Research, Practice, and Policy, October 2007, Vol. 4: No. 4.