

# 2013 Community Health Needs Assessment



Adventist Health/Medical Group  
Lincoln City  
Pacific City  
Manzanita



Women's & Family Health



Tillamook Medical Plaza



Ambulance Service

Home Care & Hospice

*Tillamook Regional Medical Center*

*Adventist Health Medical Group*

*Ambulance Service*

1000 Third Street, Tillamook, Oregon 97141

(503) 842-4444 [www.tillamookregionalmc.org/#](http://www.tillamookregionalmc.org/#)

***Prepared in collaboration with:***

Laura Acosta, BS, MPH(c)

Dora Barilla, DrPH, MPH, CHES

Marti Baum, MD

Monideepa B. Becerra, MPH, DrPH(c)

Tim Gillespie, DMin

Jessica L.A. Jackson, MA, MPH

Loma Linda University Medical Center

Community Health Development

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## EXECUTIVE SUMMARY

In 2013, Tillamook Regional Medical Center (TRMC) completed a triennial Community Health Needs Assessment (CHNA) to gain a better understanding of health status among the residents we serve. The community health needs assessment (CHNA) is conducted not only to fulfill the requirement of Patient Protection and Affordable Care Act of 2010 (H.R. 3590) for non-profit hospitals, but in response to the hospital's mission: "to share God's love by providing physical, mental and spiritual healing."

Tillamook Regional Medical Center, part of Adventist Health, is rooted in promoting whole care and the resulting CHNA was modeled after such a value. This Whole Community Care Model (LLUH, 2013) integrates social determinants of health, health status and behaviors of our community, the environment, and the health systems' readiness to provide services. Accordingly, TRMC worked closely with community partners to identify collective evaluation measures to work towards key health indicators as a region and not in isolation.

This document outlines the major indicators of health in Tillamook County and identifies priority areas. It represents a collaborative process that views health as a result of intersecting factors; as such a collaborative process will be necessary to overcome identified barriers.

### ***Key Findings:***

- Our assessment identified that preventable chronic diseases remain the leading causes of death in all service areas.
- More behavioral health services are needed in our region. The age-adjusted rate for suicide deaths in Tillamook County is higher than Oregon and the Healthy People 2020 objective for suicide mortality rates. In addition, a number of adults report regular heavy alcohol consumption.
- Children in our community require more targeted health services. Our assessment suggests issues such as poverty and poor nutrition/physical activity need to be addressed among our youngest residents
- Overall, access to health care services could be improved in our community. Tillamook County has a lower primary care provider rate than the state of Oregon and is also designated as a medically underserved area.
- Our community understands the importance of preventative care, access to good doctors, specialists, and outpatient care. However, our community also noted that costs and lack of insurance were the main barriers to obtaining treatment.

After conducting the CHNA we asked the following questions: **1) What is really hurting our communities? 2) How can we make a difference? 3) What are the high impact interventions? 4) Who are our partners? and 5) Who needs our help the most?** From this analysis, four priority areas were identified:

- Children's Health
- Chronic Disease with emphasis on: *heart disease, stroke, and cancer prevention*
- Behavioral Health with emphasis on: *suicide prevention*
- Access to Health Care Services

Moving forward, these priority areas will be used to guide the development of a Community Health Plan, with initiatives designed to address these concerns. Building a healthy community requires multiple stakeholders working together with a common purpose. We invite you to explore our health challenges in Tillamook County outlined in this report. More importantly though, we hope you use the findings in this report to conceptualize collective solutions, establish sustainable partnerships, and work towards a healthier region.

## LETTER FROM THE CEO

***Dear Community,***

As Chief Executive Office of Tillamook Regional Medical Center, I would like to thank you for your interest in the health of our community and allowing our organization, as part of Adventist Health, to be a partner in an effort to improve the health of our region. The passage of the Affordable Care Act has highlighted the importance of understanding our community's needs and in turn designing new and innovative approaches to improving the health of our population with a significant emphasis on community-based prevention. It is my pleasure to share our current Community Health Needs Assessment (CHNA) with you.



Improving community health requires expertise and engagement beyond the hospital campus and beyond the health sector. It requires the wisdom of everyone in our community. We are committed to finding innovative ways to work with all sectors of our community to ensure our community health interventions are systematic and sustained.

We call upon you to imagine a healthier region, and invite you to work with us implementing the solutions outlined in this report. Help us continue to prioritize our health concerns and find solutions across a broad range of health needs.

We look forward to our journey together, and thank you for your interest in creating a healthier community for everyone.

Sincerely,

A handwritten signature in black ink that reads "Tony S. Davy".

President & CEO

## INTRODUCTION

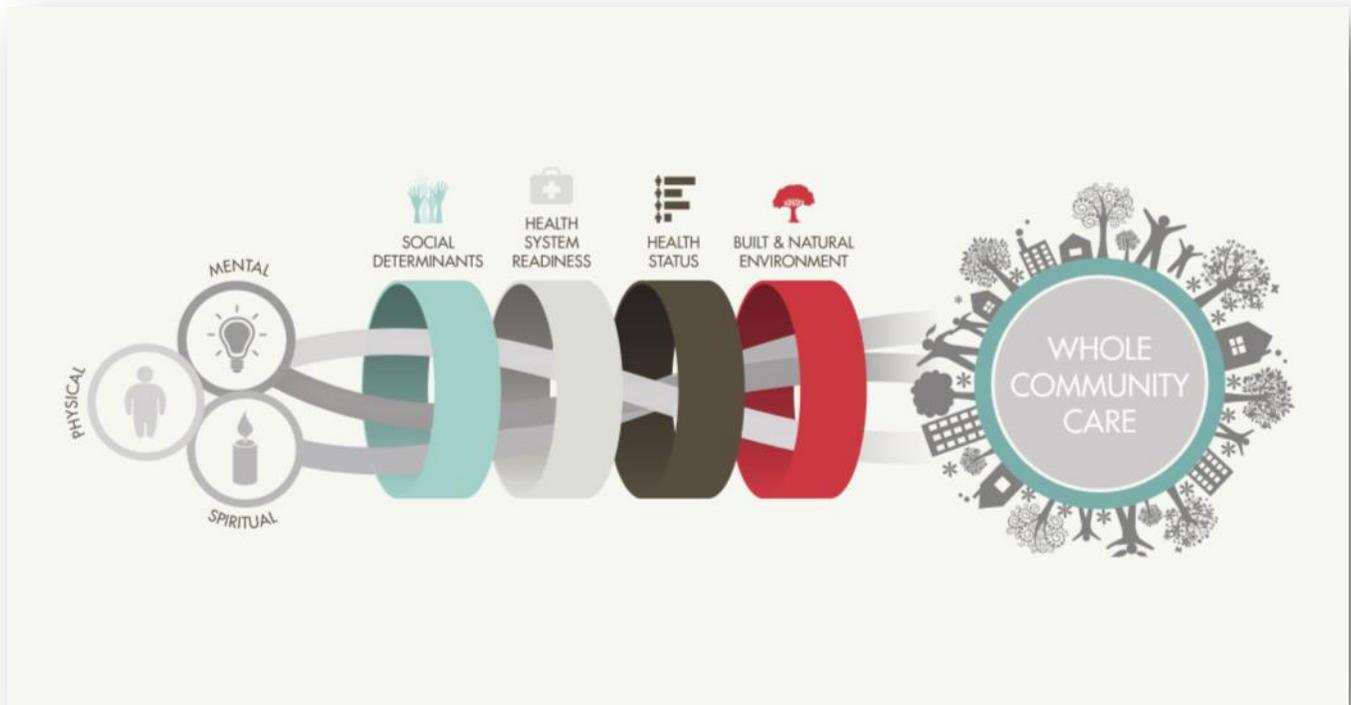
**Where and how we live is vital to our health.** As you read this document, think about health in Tillamook County as the environment in which we live, work, and play. Economic opportunities, access to nutritious foods, green space, and the availability of social networks, are key determinants in shaping our health. Our hope is to shift focus beyond pressing health care challenges to see the resources and assets in our community and how we can align them for better health outcomes.

**Tillamook Regional Medical Center, part of Adventist Health, is dedicated to understanding our community** by conducting a triennial Community Health Needs Assessment (CHNA). Developing priorities and targeting interventions from knowledge gained through this assessment, increases our ability to improve the health of our community. Developing a shared understanding of challenges and opportunities is a critical next step in creating and implementing a Community Health Plan that addresses each priority area identified.

**Tillamook Regional Medical Center is rooted in treating the individual holistically, with attention paid to physical and spiritual health.** The CHNA presented here was modeled after such a value. The Whole Community Care Model integrates social determinants of health, health status, health behaviors, the environment, and indicators of health systems' readiness to meet community health needs. This information can provide detail at differing levels, and when combined, can be used to support policy and programmatic decisions.

Measuring morbidity and mortality rates while addressing social determinants of health, allows us to assess linkages between our environment and health outcomes. For example, by comparing chronic disease outcomes (e.g. heart disease) with health behaviors (e.g. physical inactivity) and environmental factors (e.g. retail food environmental index), various patterns may emerge. This allows for a better understanding of our community's needs and methods of prioritizing interventions.

## Whole Community Care Model



Data Source: LLUH, 2013

**Building a healthy environment requires multiple stakeholders working together** with a common purpose. We invite you to explore health status in our community, which is outlined in this assessment. More importantly though, we hope you imagine a healthier region where we collectively prioritize our health concerns and find solutions across a broad range of sectors.

## METHODOLOGY/REQUIREMENTS

The community health needs assessment (CHNA) is conducted not only to fulfill the requirement of Patient Protection and Affordable Care Act of 2010 (H.R. 3590) for non-profit hospitals, but in response to the hospital's mission: "to share God's love by providing physical, mental and spiritual healing."

The primary focus of the assessment will be on elevating the health of our community and the diverse populations that we serve by identifying community needs and prioritizing community interventions. The assessment was conducted in collaboration with public health experts from Loma Linda University Health in Loma Linda, California.

### Quantitative Data

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- Data on key health indicators, morbidity, mortality, and various social determinants of health were collected from the Census, Centers for Disease Control and Prevention, Community Commons, Nielsen, and various other state and federal databases.
- The quantitative data includes County specific data, and if available, data disaggregated by service areas have been provided (Tillamook, Cloverdale, and Nehalem). When feasible, health metrics have been further compared to national benchmarks, such as Healthy People 2020 objectives.

### Qualitative Data

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To validate data and ensure a broad representation of the community, Tillamook Regional Medical Center has partnered with Pacific Coast CCO to conduct a community health survey. Questions from the survey focused on: use of and access to healthcare services, visions of a healthy community, and priority community health needs. Preliminary results of this survey can be found later in this document.

### Information Gaps

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It should be noted that the survey results are not based on a stratified random sample of residents throughout Tillamook County. The perspectives captured in this data simply represent the community members who agreed to participate and have an interest in health care. In addition, this assessment relies on several national and state entities with publicly available data. All limitations inherent in these sources remain present for this assessment.

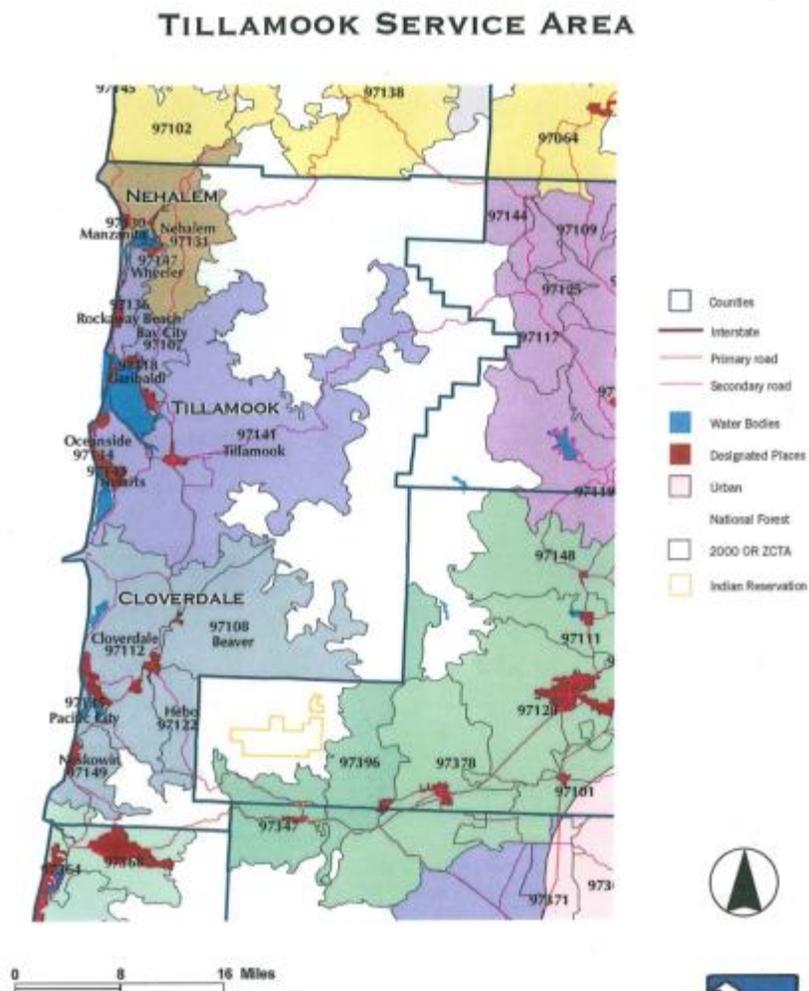
## COMMUNITY PROFILE

Tillamook Regional Medical Center is part of Adventist Health; a faith-based, not-for-profit integrated health care delivery system, and was built on its current site in 1950. Our hospital participates in numerous national and state quality initiatives, as well a national patient satisfaction benchmarking. Results consistently rank us in the top decile for performance. As the world of health care continues to advance, the dedicated members of our health care team plan on contributing to high quality medical services and positive growth in Tillamook County.

### Primary Service Area

Tillamook Regional Medical Center's service area is all of Tillamook County, which contains three geographic areas:

- Cloverdale (South)
- Tillamook (Central)
- Nehalem (North)



OREGON OFFICE OF RURAL HEALTH

## SOCIAL DETERMINANTS OF HEALTH

***“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change,”*** as stated by the Institute of Medicine is reflective of the depth of needed preventive strategies to combat today’s burden of chronic diseases in the United States.

Social determinants of health are the conditions in which people are born, grow, live, work, and age; and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and political.

The conditions in which people live determine, in part, why Americans are generally not as healthy as they could be and the current disparities in our health outcomes. Lack of options for healthy, affordable food or safe places to play in some neighborhood make it nearly impossible for residents to make healthy choices. In contrast, people living in neighborhoods with safe parks, good schools, high employment rates, and stronger cohesion are provided with some of the key requirements to better health.

Improving the conditions in which people live, learn, work, and play and addressing the inter-relationship between these conditions will create a healthier population. Integrating health policy efforts with those related to education, housing, business, transportation, agriculture, media, and other areas outside of the health sector will ultimately improve the health, safety, and prosperity of the nation.

As such, the following indicators are provided to give an overall picture of Tillamook County’s health status. This will help us determine appropriate interventions for elevating the health status of our communities and population.

## Demographics

### Population

#### ***Importance to Community Health Development***

Population is a key component of demographic analysis. It provides insight into the resources needed for a healthy community. Monitoring population is critical to anticipate changes in the population size and utilization of resources, such as healthcare services.

<b>Population Change, 1990-2017 (projected)</b>		
<b>Tillamook Service Area</b>		
	<b>Population</b>	<b>Percent Change</b>
1990	15,435	n/a
2000	17,301	12.10%
2012	17,868	3.30%
2017	18,161	1.60%
<b>Cloverdale Service Area</b>		
	<b>Population</b>	<b>Percent Change</b>
1990	3,801	n/a
2000	4,191	10.30%
2012	4,283	2.20%
2017	4,366	1.90%
<b>Nehalem Service Area</b>		
	<b>Population</b>	<b>Percent Change</b>
1990	2,306	n/a
2000	2,737	18.70%
2012	3,239	18.30%
2017	3,359	3.70%

Data Source: Purchased annually from Nielsen [by ZIP].

#### ***Key Finding***

- The population of Tillamook County is steadily growing with the largest growth expected for the Nehalem service area.

## Age and Gender

### ***Importance to Community Health Development***

Age is a critical component of understanding a community's profile and provides elements in planning for needed health services. Younger populations require more prevention and health education while Older populations are prone to certain chronic diseases and require health services in higher acuity settings. With the Baby Boomer generation aging, chronic diseases are expected to increase. January 2011 marked the beginning stage of Baby Boomers entering the Medicare program. Having an accurate count of the age distribution of the service area is imperative in ensuring availability of adequate health care services.

Males and females have differing healthcare needs and require targeted services. Understanding gender distributions of the community can ensure appropriate healthcare delivery. Gender also has important health implications in terms of access to resources and services, engagement in risky behaviors, and environmental exposures.

<b>Change in Age Distribution, 2000-2012</b>			
<b>Tillamook Service Area</b>			
<b>Age (years)</b>	<b>Tillamook</b>	<b>Cloverdale</b>	<b>Nehalem</b>
0-14	-4.60%	-13.90%	22.10%
15-44	-7.50%	-7.90%	7.10%
45-64	23.90%	18.70%	27.90%
65+	3.30%	5.40%	16.40%
Total	3.30%	2.20%	18.30%

Data Source: Purchased annually from Nielsen [by ZIP].

### ***Key Findings***

- For both Tillamook and Cloverdale service areas, those aged 0 to 44 declined in population growth between 2000 and 2012, while the largest growth was noted among ages 45 to 64 years.
- For Nehalem service area, the largest growth was also in age group 45-64 years followed by 0 to 14 years.

## Population by Age and Gender, 2012

Tillamook Service Area				
Age	Male	Female	Total	Percent
0-14	1,615	1,484	3,099	17.3%
15-20	790	585	1,374	7.7%
21-24	400	394	794	4.4%
25-34	948	757	1,705	9.5%
35-44	1,031	940	1,971	11.0%
45-64	2,805	2,855	5,660	31.7%
65-74	838	982	1,820	10.2%
75-84	481	545	1,026	5.7%
85+	152	267	419	2.3%
<b>Total</b>	<b>9,060</b>	<b>8,808</b>	<b>17,868</b>	<b>100%</b>
Cloverdale Service Area				
Age	Male	Female	Total	Percent
0-14	319	293	612	14.3%
15-20	143	132	275	6.4%
21-24	87	91	178	4.2%
25-34	207	179	386	9.0%
35-44	184	184	368	8.6%
45-64	754	819	1,573	36.7%
65-74	234	267	501	11.7%
75-84	143	151	294	6.9%
85+	39	57	96	2.2%
<b>Total</b>	<b>2,110</b>	<b>2,173</b>	<b>4,283</b>	<b>100.0%</b>
Nehalem Service Area				
Age	Male	Female	Total	Percent
0-14	213	190	403	12.4%
15-20	90	69	159	4.9%
21-24	45	50	95	2.9%
25-34	139	106	245	7.6%
35-44	145	142	287	8.9%
45-64	520	622	1,142	35.3%
65-74	268	284	552	17.0%
75-84	121	138	259	8.0%
85+	35	62	97	3.0%
<b>Total</b>	<b>1,576</b>	<b>1,663</b>	<b>3,239</b>	<b>100.0%</b>

Data Source: Purchased annually from Nielsen [by ZIP].

### Key Findings

- Gender distribution is similar in Cloverdale and Nehalem service areas, with a slightly higher number of females.
- Tillamook service area has a higher number of males.

## Race/Ethnicity

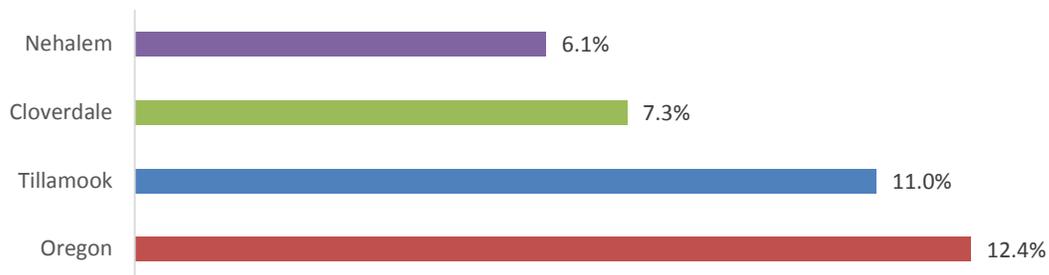
### Importance to Community Health Development

A health disparity is defined as a persistent gap between the health statuses of minorities as compared to non-minorities in the United States. Despite continued advances in health care and technology, racial and ethnic minorities continue to have higher rates of disease, disability, and premature death than non-minorities

Racial Distribution in Tillamook County, 2007-2011							
	White	Black	Asian	Native American/ Alaska Native	Native Hawaiian/ Pacific Islander	Other Race	Multiple Races
Tillamook County	92.60%	0.45%	0.57%	0.84%	0.06%	3.19%	2.29%
Oregon	85.37%	1.79%	3.66%	1.50%	0.35%	3.77%	3.55%

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates, retrieved from American Fact Finder

### Hispanic Population, 2012



Data Source: Purchased annually from Nielsen [by ZIP].

### Key Findings

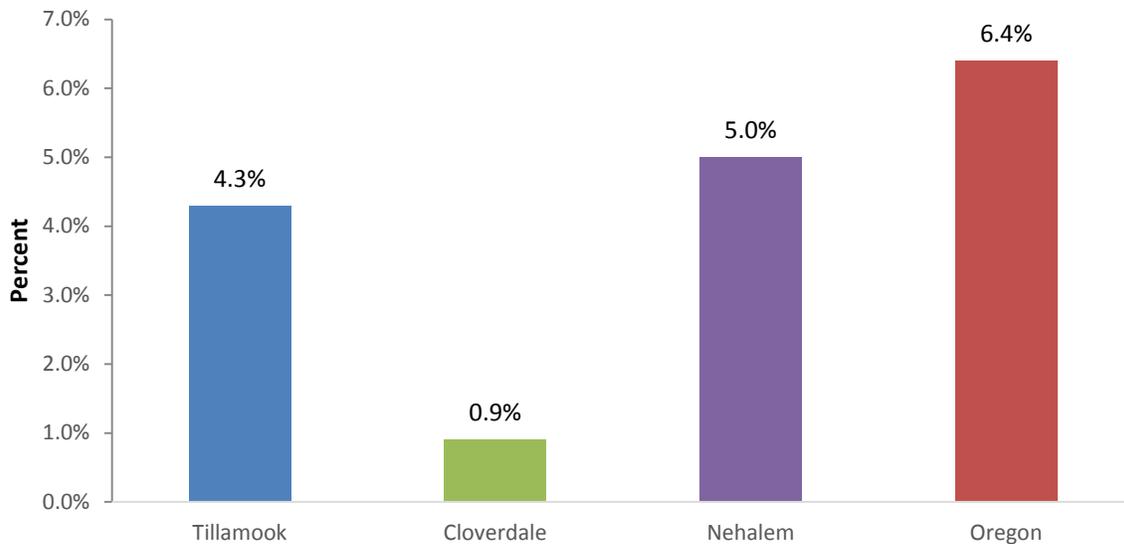
- Whites (including non-Hispanics and Hispanics) comprise the largest percent of the population for each service area.
- Tillamook service area has the highest prevalence of Hispanics, followed by Cloverdale.

## Primary Language

### ***Importance to Community Health Development***

Access and utilization of health care services can be affected by a person's primary language. Those unable to communicate with physicians or health care providers in their language of choice are less likely to have follow up visits and adhere to medications.

**Population 5+ years who speak English less than "very well"  
(2007-2011)**



Data Source: U.S. Census Bureau, 2007-2011 American Community Survey, retrieved from American Fact Finder

### ***Key Finding***

- Nehalem, as compared to Tillamook and Cloverdale service areas, has the highest percent of population who reported limited English language proficiency.

## Socioeconomic Status

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### *Importance to Community Health Development*

**The single best predictor of a person's health status is his or her socioeconomic status.**

**Poverty** is a particularly strong risk factor for disease and death among children. Children who grow up in poverty are eight times more likely to die from homicide, five times more likely to have a physical or mental health problem, and twice as likely to be killed in an accident. Family poverty is relentlessly correlated with high rates of teenage pregnancy, failure to earn a high school diploma, and violent crimes.

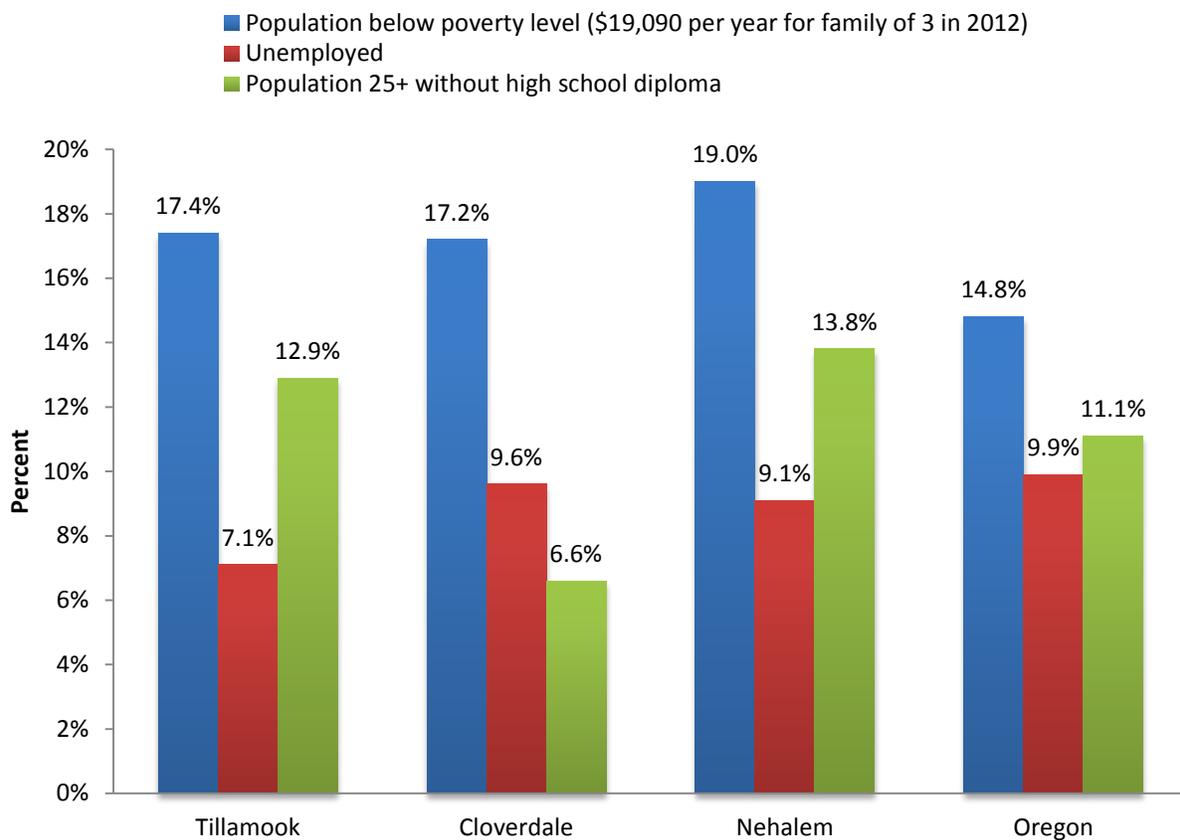
**Per capita income** can reflect aspects of the economic health of a community. When per capita income increases a region generates wealth faster than its population increases. A higher relative per capita income signals greater discretionary income for the purchase of goods and services. This contributes to overall economic strength and a sense of material wellbeing, as residents have the financial resources needed to survive and prosper.

Higher income and low poverty levels have been associated with better health outcomes, higher preventive care utilization, and lower rates of chronic disease-associated morbidity and mortality. Higher income levels are also associated with better nutrition, higher levels of physical activity, and overall better general health. Addressing **unemployment levels** is also important to community development, because unemployment can lead to financial instability and serve as a barrier to healthcare access and utilization.

**Education** is also an important factor in health status. Independent of its relation to behavior, education influences a person's ability to access and understand health information. For example, people who are illiterate will not be helped by written educational materials produced by public health practitioners. Just as unemployment impacts community health, so does low educational attainment. Understanding the distribution of the educational attainment levels of a community can help ensure business development and promotion of necessary resources.

**Education is correlated with a host of preventable poor health outcomes** including increased rates of childhood illness, respiratory illness, renal and liver disease, and diabetes, to name a few. Other correlations to education include lower life expectancy, lower rates of perinatal care and healthcare access, and worse mental health outcomes. Higher educational levels are associated with lower morbidity and mortality.

### Socioeconomic Status (2007-2011)



Data Source: U.S. Census Bureau, 2007-2011 American Community Survey, retrieved from American Fact Finder

On-Time Graduation Rate	
Tillamook County	76.7%
Oregon	76.5%
United States	75.5%
<b>Healthy People 2020 Target</b>	<b>82.4%</b>

Data Source: The University of Wisconsin, Population Health Institute, County Health Rankings, 2012 and the U.S. Department of Education, National Center for Education Statistics (NCES), Common Core of Data, Public School Universe Survey Data, 2005-06, 2006-07 and 2007-08. As presented in <http://www.chna.org>

Children Living in Poverty, 2007-2011		
	Tillamook County	Oregon
Total Population	24,375	3,727,420
Population Under Age 18	4,888	848,403
Population Under Age 18 in Poverty	1,332	166,082
Percent Population Under Age 18 in Poverty	27.25%	19.58%

Data Source: U.S. Census Bureau, 2007-2011 American Community Survey 5-Year Estimates, retrieved from American Fact Finder

Income for Tillamook County, 2011		
	Tillamook County	Oregon
<sup>1</sup> Per capita personal income, 2011	\$34,194	\$37,527
<sup>2</sup> Median household income, 2011	\$41,246	\$46,876

Data Source: <sup>1</sup>Bureau of Economic Analysis, BEARFACTS <sup>2</sup>Census Small Area Income & Poverty Estimates.

### Key Findings

- Overall, the percent of adults in Tillamook County who graduate high school on time is lower than the Healthy People 2020 objective for high school graduation rate.
- In Tillamook County, 27% of children (under 18 years of age) live in poverty, a much higher rate than Oregon (~20%).
- The per capita income for Tillamook County ranked 15<sup>th</sup> in Oregon.

## Social Stability

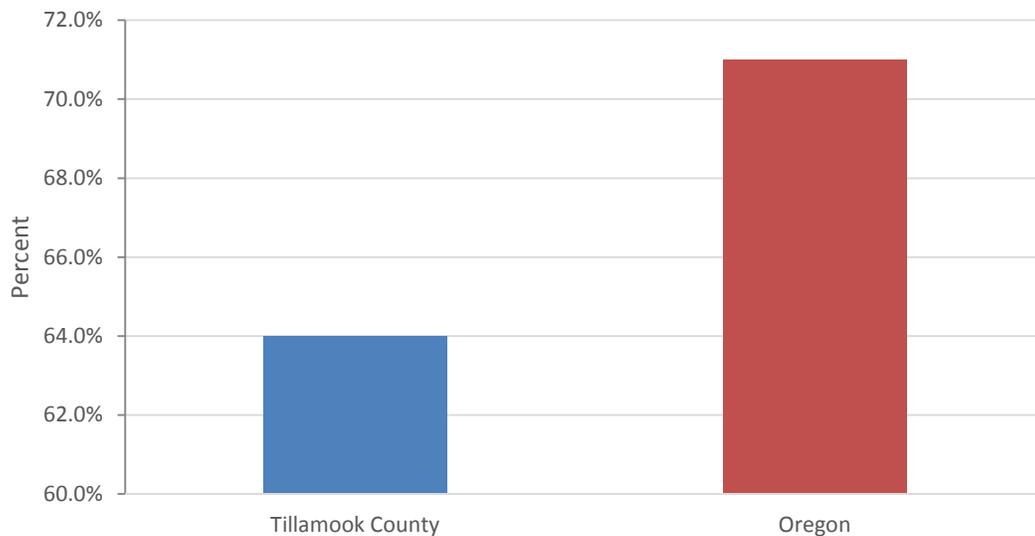
### Housing

#### ***Importance to Community Health Development***

Homeownership is valued as a means to develop personal wealth, increase social opportunities, prevent financial insecurity, and maximize emotional and physical well-being. Homeowners experience increased emotional well-being, greater attachment to their communities, and higher levels of civic participation. Lack of adequate and stable housing is associated with a number of chronic and severe health problems.

In 2009, the Northwest Oregon Housing Authority Director reported that no public housing facilities existed in Tillamook County. The Housing Authority, Section 8 housing, and other voucher programs offer about 160 housing units in the service area. About 282 people are currently on a wait list for housing and the wait to get into housing, on average, is two years.

#### **Availability of Affordable Housing**



Data Source: Tillamook County Health Department Comprehensive Local Public Health Authority Plan, 2012-2013.

#### ***Key Finding***

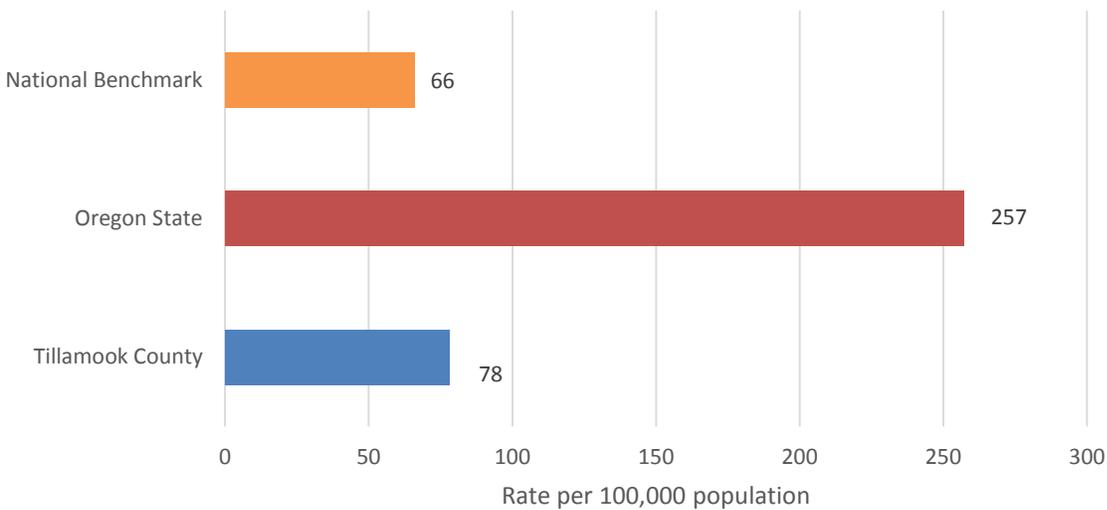
- Housing affordability remains a concern in Tillamook County with 64% of the population, compared to 71% in the State, having access to affordable housing.

## Violence

### ***Importance to Community Health Development***

High rates of violent crimes are also indicative of compromised physical safety and psychological well-being of community members. Crime rates can also deter residents from pursuing healthy behaviors, such as walking for leisure or to and from work or school.

### **Violent Crime Rate**



Data Source: County Health Rankings, 2013.

### ***Key Finding***

- Violent crime rate in the County is higher than the national benchmark.

## HEALTH STATUS

**One out of every five dollars in the United States is spent on health care** and yet our nation ranks lower than most industrialized nations in major health indicators. For example, among 191 nations assessed by the World Health Organization, the United States ranked 43rd for adult female mortality, 42nd for adult male mortality, 39th for infant mortality, and 36th for life expectancy. Among 19 industrialized nations evaluated for premature deaths, we ranked last.

Below we discuss our community's health status, summarizing key birth and health indicators, leading causes of deaths, hospitalization rates, and associated health behaviors (physical activity, dietary habits, and substance abuse).

### Birth Indicators

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#### *Importance to Community Health Development*

##### Live Birth

Live births are an indication of population growth and demand on a community's existing resources, infrastructure, schools, and the healthcare system/services. It is critical to understand current birth trends to ensure adequate availability of needed resources.

##### Low Birth Weight

Low birth weight is indicative of the general health of newborns and often a key determinant of survival, health, and development. Understanding such data is critical as infants born at low birth weights are at a heightened risk of complications, including infections, neurological disorders, Sudden Infant Death Syndrome, breathing problems, learning disabilities, and even chronic diseases.

##### Infant Mortality Rates

The infant mortality rate (IMR) is critical as it is indicative of the existence of broader issues pertaining to access to care and maternal child health. Such rates can further provide us metrics of community health outcomes and areas of needed services and interventions.

<b>Birth Indicators (average per year-rate per 1,000 births), 2007-2011</b>							
	<b>Total</b>	<b>Race</b>					<b>Ethnicity</b>
		<b>White</b>	<b>African American</b>	<b>Native American</b>	<b>Asian</b>	<b>Other</b>	<b>Hispanic</b>
<b>Tillamook Service Area</b>							
Average total birth per year	203.0	154.8	0.2	2.6	2.8	4.4	45.0
<b>Cloverdale Service Area</b>							
Average total birth per year	30.0	25.4	0.0	0.2	0.4	0.2	5.8
<b>Nehalem Service Area</b>							
Average total birth per year	25.0	20.0	0.0	0.8	0.6	0.8	3.0
<b>Oregon</b>							
Average total birth per year	47,282	34,238	1,010	661	2,491	1,136	9,629

Data Source: Purchased annually from Oregon Department of Human Services, Office of Disease Prevention and Epidemiology, Center for Health Statistics (and Vital Records) [by ZIP].

<b>Infant Mortality Rate, 2003-2009</b>			
	<b>Total Births</b>	<b>Total Infant Deaths</b>	<b>Infant Mortality Rate (Per 1,000 Births)</b>
Tillamook County	1,885	13	6.9
Oregon	331,848	1,807	5.45
United States	58,600,996	393,074	6.71
HP 2020 Target			<= 6.0

Data Source: Centers for Disease Control and Prevention, National Vital Statistics System: 2003-09. Accessed using CDC WONDER. As presented by CHNA.org

## Key Findings

- Compared to the State, Cloverdale, and Nehalem service areas, Tillamook service area has the highest rate of low birth weights.
- In both Tillamook and Cloverdale, the Asian population reported the highest rate of low birth weight (though inflated rates are likely due to small population size).
- Infant mortality rate for all service areas did not meet the Healthy People 2020 objective, with Nehalem reporting the highest.

## Leading Causes of Death

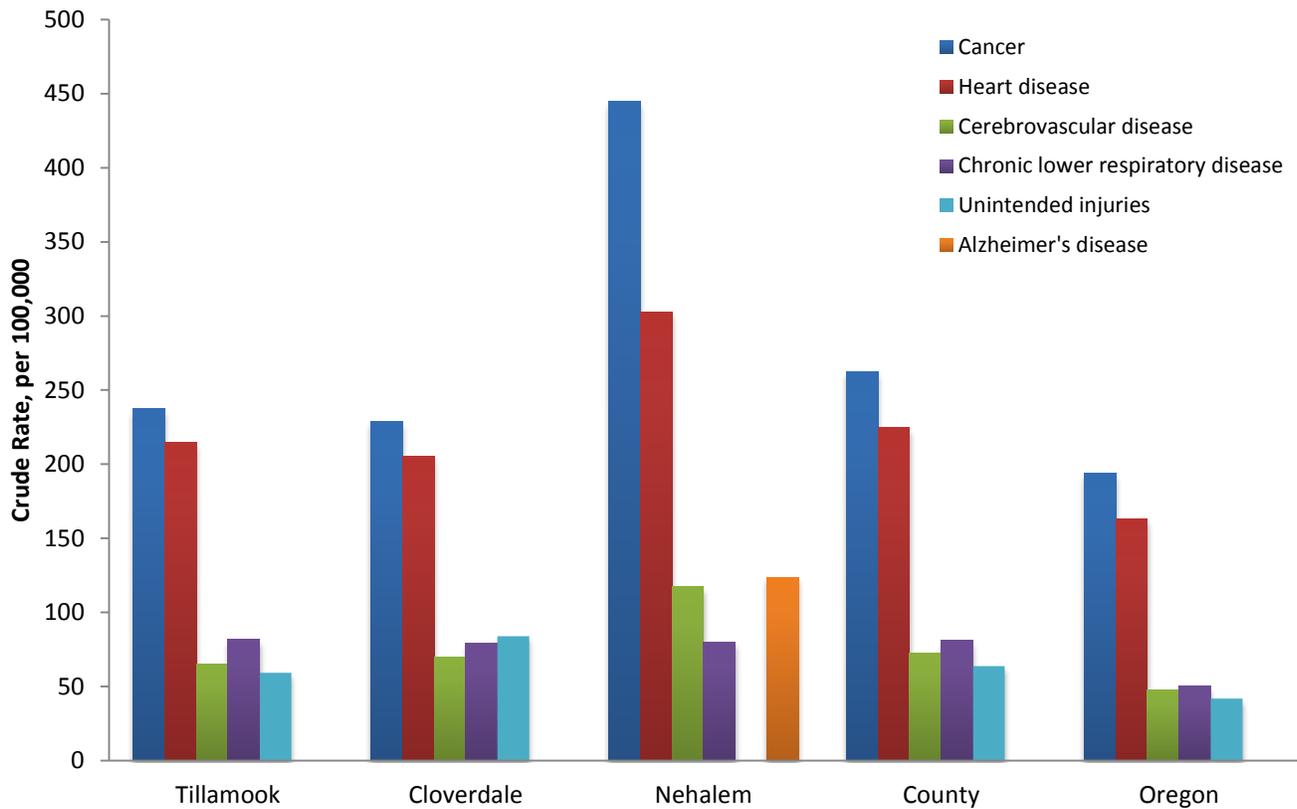
### **Importance to Community Health Development**

Mortality data provides the opportunity to identify conditions that pose the greatest risk to life versus those which cause illness yet pose minimal risk. Studying trends in mortality over time helps us to understand how the health status of the population is changing and assists in the evaluation of **what's really killing us?**

**Cause-Specific Crude Death Rates (per 100,000), average per year 2007-2011**

	Service Area				
	Tillamook	Cloverdale	Nehalem	Tillamook County	Oregon
Total	1024.2	957.3	1506.6	1074.4	819
Cancer	237.3	228.8	444.6	262.3	193.7
Heart disease	214.9	205.5	302.6	224.5	163.1
Cerebrovascular disease	64.9	70.0	117.3	72.5	47.9
Chronic lower respiratory disease	81.7	79.4	80.3	81.1	50.2
Unintended injuries	59.3	84.1	61.7	63.8	41.9
Alzheimer's disease	29.1	28.0	123.5	41	32.5
Diabetes	22.4	28.0	30.9	24.4	27.6
Flu and pneumonia	10.1	9.3	18.5	11	11.7
Suicide	20.1	14.0	18.5	18.9	16.2
Alcohol induced	32.5	14.0	24.7	28.4	14.7

Data Source: Purchased annually from Oregon Department of Human Services, Office of Disease Prevention and Epidemiology, Center for Health Statistics (and Vital Records). Denominator is current Claritas population.



Data Source: Purchased annually from Oregon Department of Human Services, Office of Disease Prevention and Epidemiology, Center for Health Statistics (and Vital Records). Denominator is current Claritas population.

### Key Findings

- Preventable chronic diseases remain the leading causes of death in all service areas.
- Cancer was the leading cause of death in all areas, with the highest rates in Nehalem.
- Cancer, heart disease, stroke, and respiratory illness are the four major leading causes of death in all areas.
- In the Nehalem service area, unlike other regions, Alzheimer's disease was the fifth leading cause of death while unintended injuries ranked fifth for others.

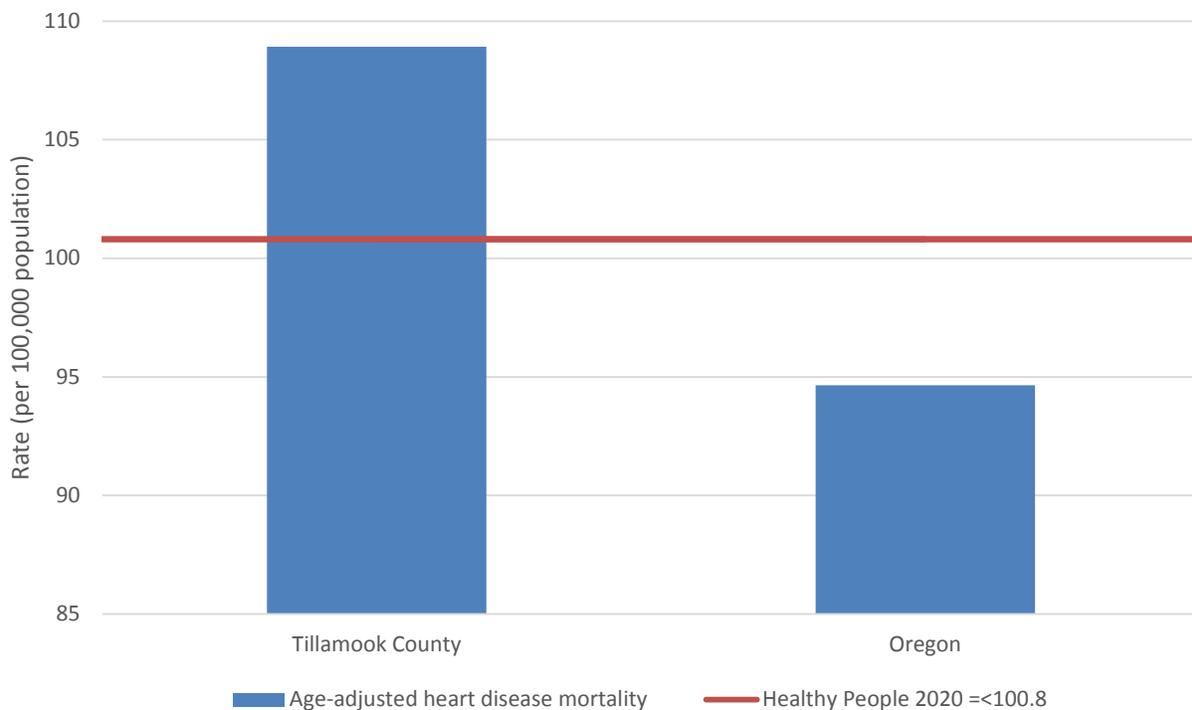
## Chronic Disease Burden

### Heart Disease and Stroke

#### ***Importance to Community Health Development***

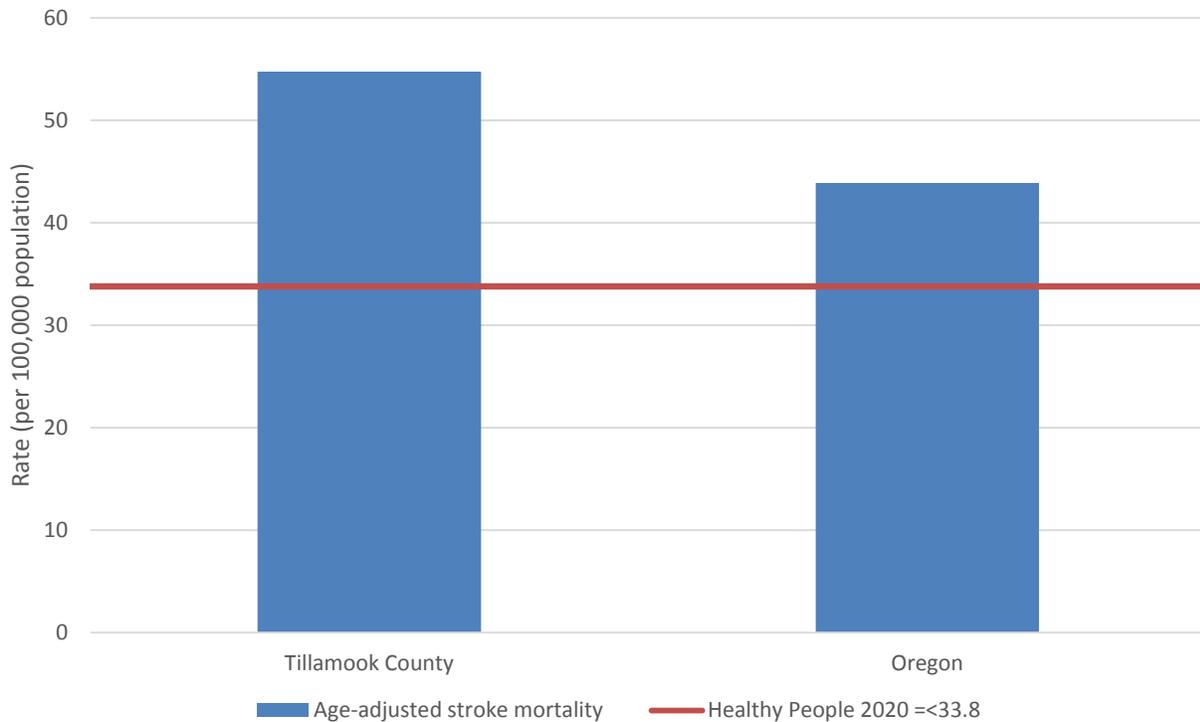
1 in 2 American adults have at least one chronic disease and 70% (1.7 million) of all annual deaths are attributable to such diseases. Heart disease and stroke are the first and third leading causes of death, respectively. According to the Centers for Disease Control and Prevention, heart disease and stroke have also contributed to 4 million cases of disability in the nation. Understanding the trends in our community can help create targeted interventions.

#### **Age-Adjusted Death Rate, Heart Disease Mortality, 2006-2010**



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

## Age-Adjusted Death Rate, Stroke Mortality , 2006-2010



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

Age-Adjusted Stroke Mortality, by Race/Ethnicity						
	White	Black	Asian	American Indian/ Alaskan Native	Hispanic / Latino	Not Hispanic / Latino
Tillamook County	54.25	no data	no data	no data	no data	53.18
Oregon	43.62	63.29	44.21	36.85	38.52	43.92

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

### Key Findings

- Tillamook County has a higher rate of heart disease and stroke mortality than Oregon State and the Healthy People 2020 objective.

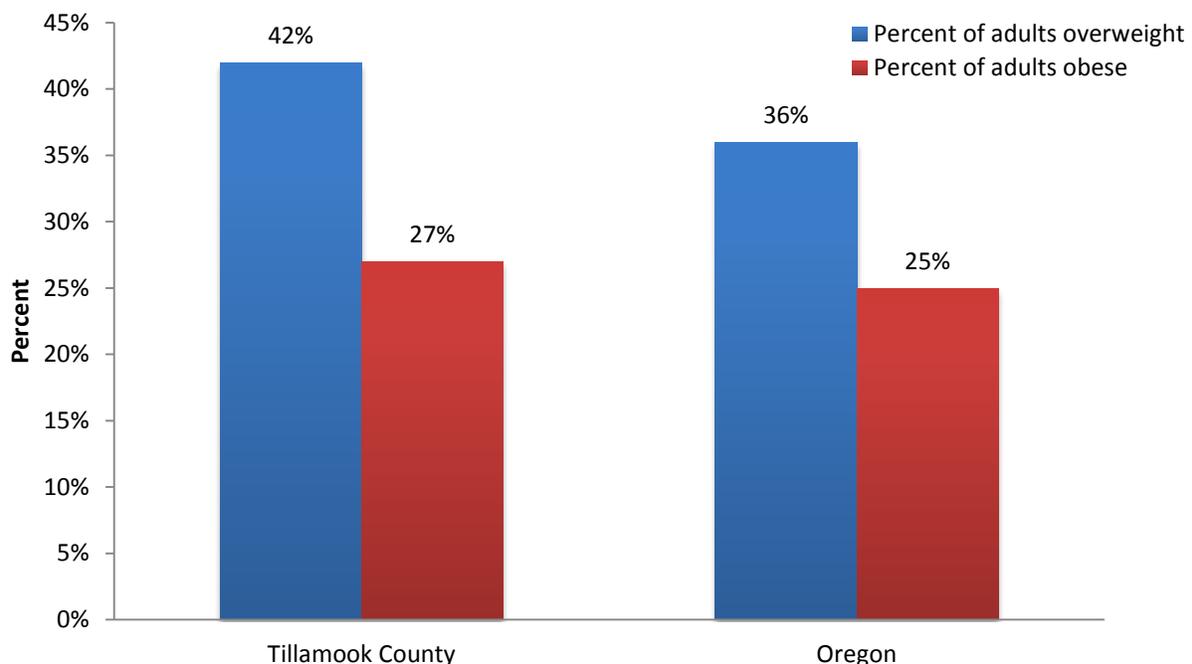
## Obesity

### ***Importance to Community Health Development***

Understanding weight status in a community is critical in ensuring proper health promotion. Diet and body weight are related to health status and being overweight or obese is associated with a higher risk of heart disease and stroke morbidity and mortality.

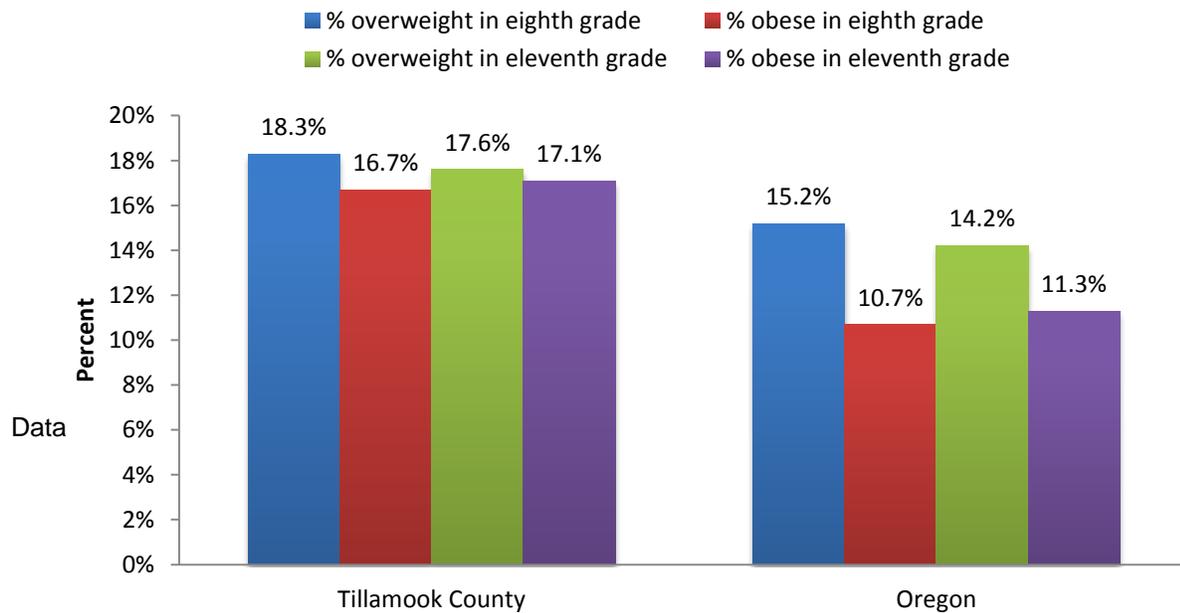
**1 in 3 American adults are obese.** Between 1998 and 2008 the adult obesity rate has doubled while the childhood obesity rate has tripled. Increased body mass index (BMI) has been associated with heightened risk of several chronic diseases, including heart and cerebrovascular disease. In 2008, medical costs related with obesity were estimated at \$147 billion; the medical costs for people who are obese were \$1,429 higher than those of normal weight. Obesity affects some groups more than others. For example, non-Hispanic Blacks have the highest age-adjusted rates of obesity (49.5%) compared with Mexican Americans (40.4%), all Hispanics (39.1%) and non-Hispanic Whites (34.3%).

### **Adult Weight Status, 2006-2009**



Data Source: Oregon Department of Human Services; Center for Health Statistics, Adult Survey (BRFSS) Selected Topics by County.

## Weight Status of Eighth and Eleventh Graders, 2007-2008



Source: Oregon Overweight, Obesity, Physical Activity and Nutrition Facts, 2012

### Key Findings

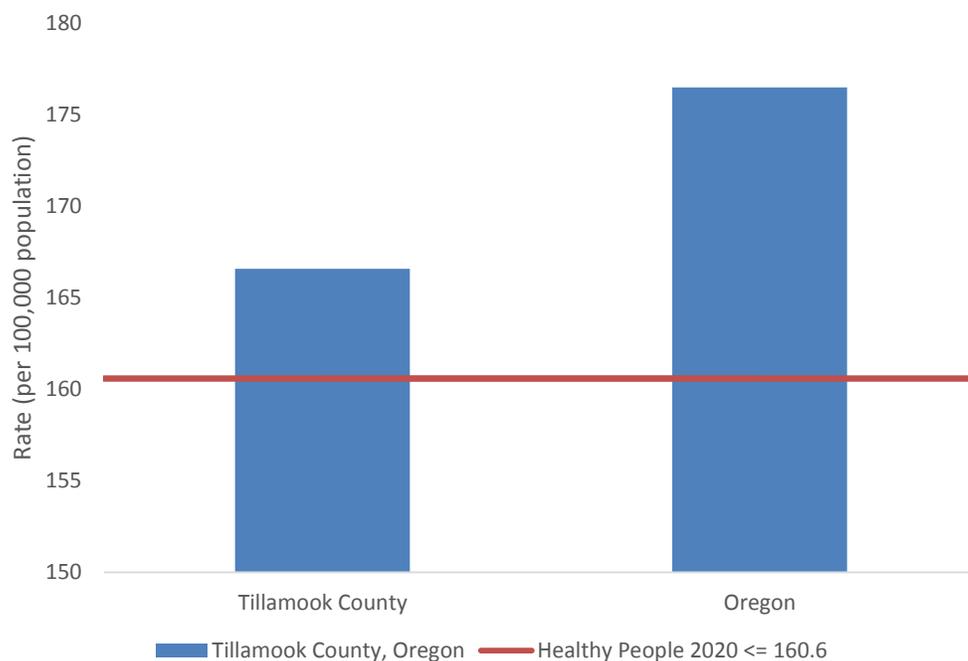
- Tillamook County has a higher percent of adults who are considered overweight/obese than the state of Oregon.
- In Tillamook County, approximately 18% of both eighth and eleventh graders are overweight.
- In Tillamook County, nearly 17% of both eighth and eleventh graders are obese; well above the **Healthy People 2020 objective of less than 9.6%**.

## Cancer

### ***Importance to Community Health Development***

The cancer objectives for Healthy People 2020 support monitoring trends in cancer incidence, mortality, and survival to better assess the progress made toward decreasing the burden of cancer in the United States. The objectives reflect the importance of promoting evidence-based screening for cervical, colorectal, and breast cancer by measuring the use of screening tests. For cancers with evidence-based screening tools, early detection must include the continuum of care from screening to appropriate follow-up of abnormal test results and referral to cancer treatment.

### **Age-Adjusted Cancer Mortality Rate, 2006-2010**



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

**Age-Adjusted Cancer Mortality Rate, by Gender  
(2006-2010)**

	Male	Female
Tillamook County	205.22	135.02
Oregon	208.48	153.8

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

The following indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older).

**Age-Adjusted Breast Cancer Incidence**

	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
<b>Tillamook County, Oregon</b>	26	129.7
<b>Oregon</b>	2,892	129.4
<b>United States</b>	207,458	119.7

Data Source: State Cancer Profiles: 2006-10, as presented by CHNA.org

The following indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older).

**Age-Adjusted Colorectal Cancer Incidence**

	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
<b>Tillamook County, Oregon</b>	16	42.2
<b>Oregon</b>	1,718	40.8
<b>United States</b>	141,281	43.9
<b>HP 2020 Target</b>		<= 38.6

Data Source: State Cancer Profiles: 2006-10, as presented by CHNA.org

**Key Findings**

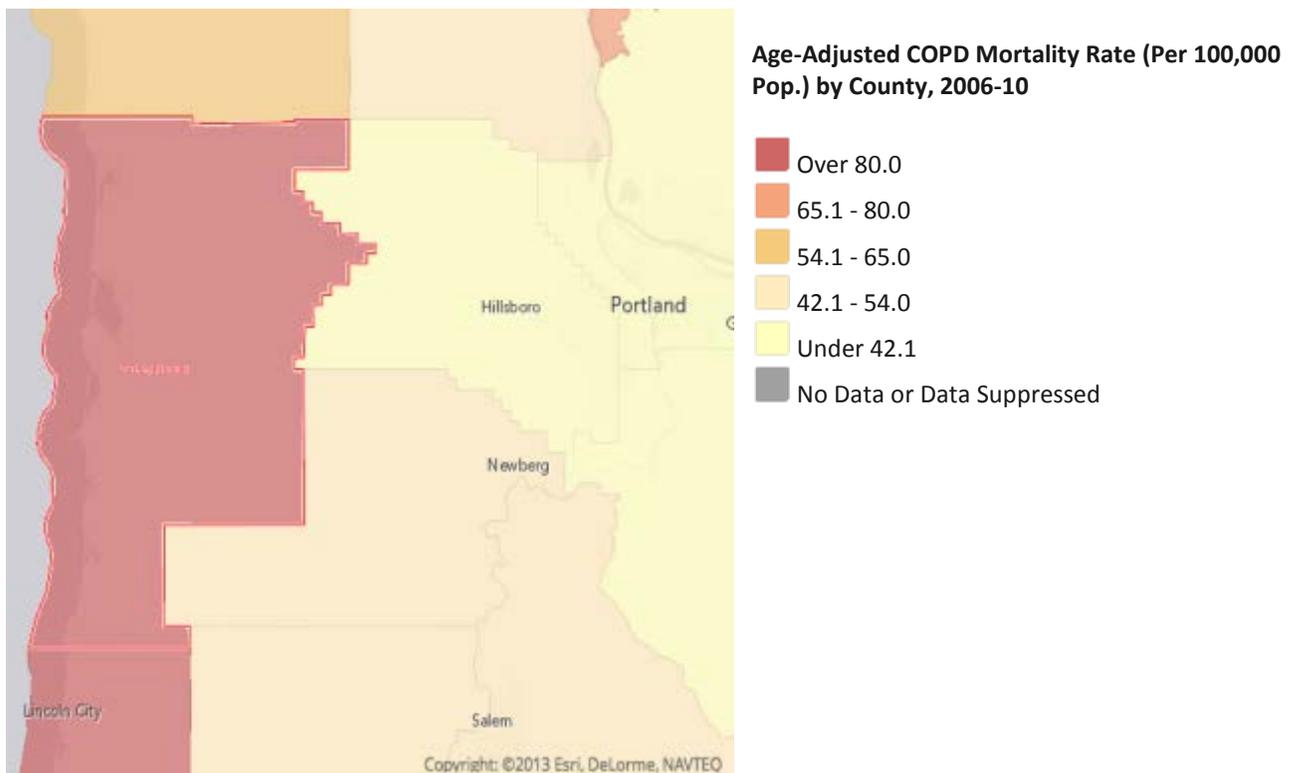
- Tillamook County’s “all cause” cancer mortality is higher than the Healthy People 2020 target, with higher rates among males.

- In comparison to the State, Tillamook County has slightly higher incidence of breast cancer and is significantly higher than Healthy People objective for colorectal cancer incidence.

## Respiratory Diseases

### ***Importance to Community Health Development***

Respiratory health is related to general health and can be indicative of poor air quality. Key respiratory illnesses include chronic obstructive pulmonary disease (COPD) and asthma. COPD is characterized by narrowing of airways and loss of elastic recoil thus leading to irreversible airflow obstruction. Moreover, COPD is progressive and irreversible. Asthma is characterized by repeated episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. In 2011, nearly 26 million Americans reported asthma, with 7.1 million being children under 18 years of age.



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

The **pediatric asthma** estimates below are for those under 18 years of age and represent the estimated number of children who had asthma during 2011. This estimate is based on state rates (BRFSS) when available or national rates applied to county population estimates (US Census).

**In Tillamook County, 473 cases of pediatric asthma were identified.**

Data Source: American Lung Association, Epidemiology and Statistics Unit, Research and Health Education, 2013.

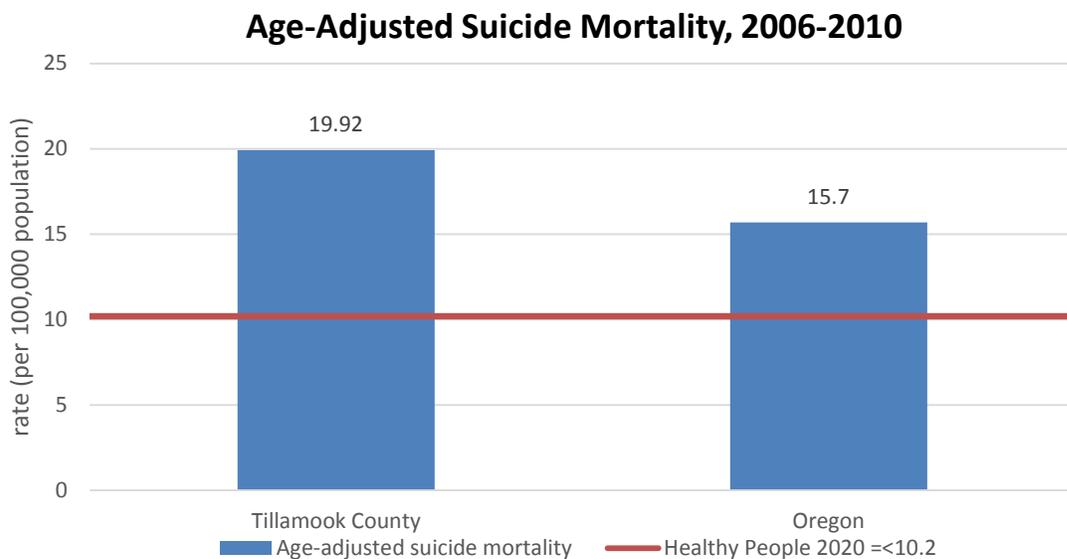
**Key Finding**

- Respiratory diseases remain a health/public health concern in Tillamook County.

**Behavioral Health**

**Importance to Community Health Development**

Optimal behavioral health (often referred to as mental health) is a state of successful performance of cognitive and mental function. This results in productive activities, fulfilling relationships with other people, and the ability to change and to cope with challenges. Behavioral health is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to one’s community or society, as a whole.



Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010, as presented by CHNA.org

### Key Finding

- The age-adjusted rate for suicide deaths in Tillamook County is significantly higher than Oregon and the Healthy People 2020 objective for suicide mortality rates.

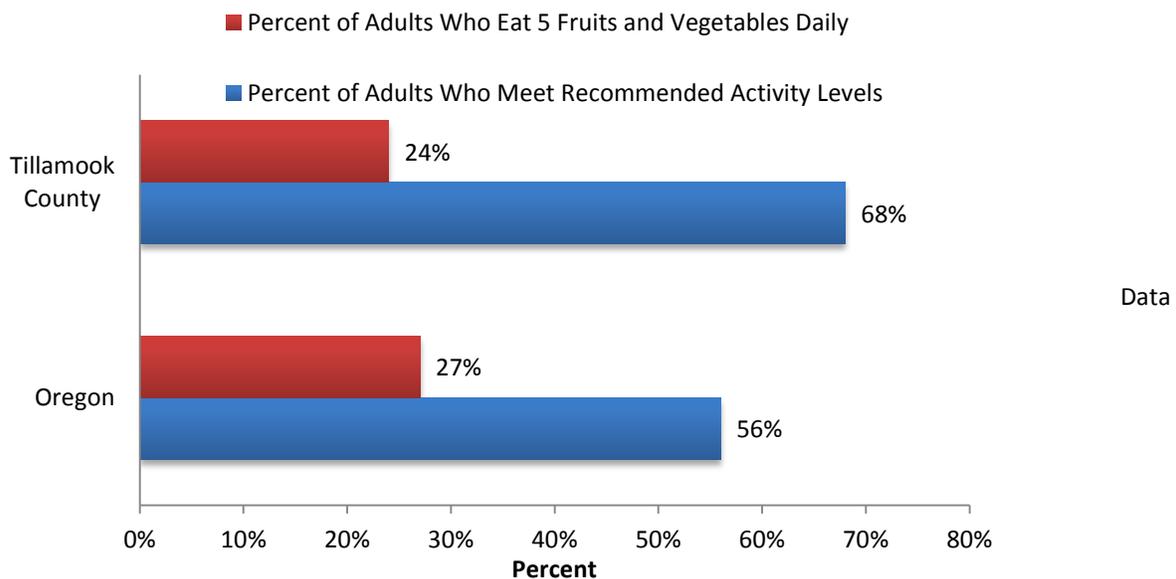
## Health Behaviors

### Nutrition and Physical Activity

#### Importance to Community Health Development

Regular physical activity and a healthy diet, especially throughout life, are important in maintaining good health, improving psychological well-being, and preventing premature deaths.

### Nutrition and Physical Activity, 2006-2009



Source: Oregon Department of Human Services; Center for Health Statistics, Adult Survey (BRFSS) Selected Topics by County.

### Key Finding

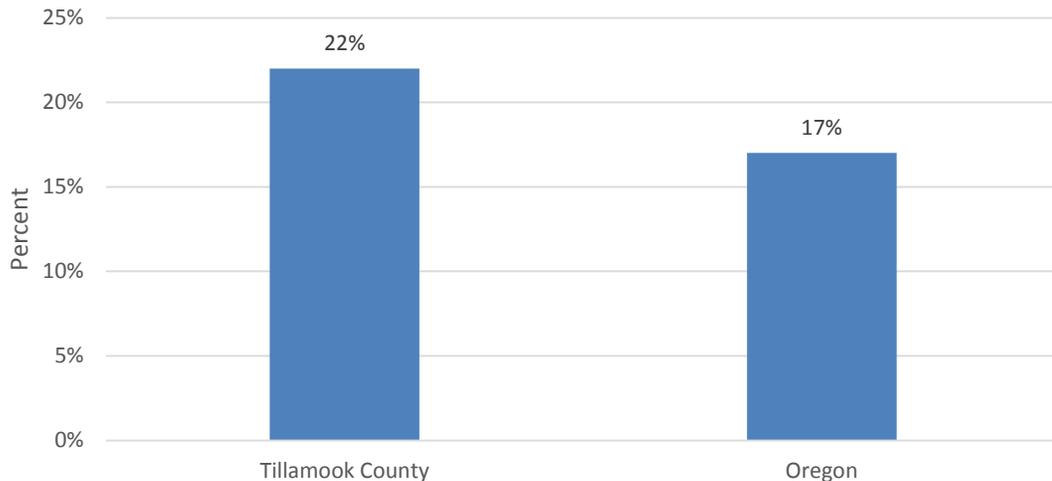
- In Tillamook County, less than 25% of adults consume five servings of fruits and vegetables a day and less than 70% of adults meet recommended physical activity levels.

## Tobacco Use

### ***Importance to Community Health Development***

Tobacco use is attributable to a number of diseases, including heart disease, stroke, and lung cancer. It remains the single most preventable cause of morbidity and mortality in the United States. Specifically, cigarette smoking results in more deaths annually than deaths due to AIDS, alcohol, cocaine, heroin, homicide, suicide, vehicle crashes, and fires, combined. Each year, approximately 443,000 Americans die due to tobacco-related illnesses and for every person who dies from such a cause, 20 more Americans suffer at least one serious tobacco-related illness.

**Percent of Adults Who Currenly Smoke Cigarettes  
2006-2009**



Data Source: Oregon Department of Human Services; Center for Health Statistics, Adult Survey (BRFSS) Selected Topics by County.

### ***Key Finding***

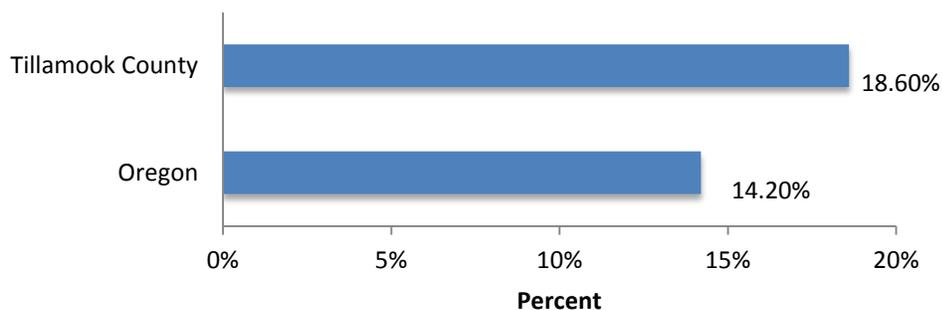
- Over 20% of adults in Tillamook County, as compared to 17% in Oregon, reported being current smokers.

## Substance Abuse/Heavy Alcohol Use

### ***Importance to Community Health Development***

Substance abuse has a major impact on individuals, families and communities. The effects of substance abuse are cumulative, contributing to costly social, physical, mental, and public health problems. This indicator specifies the percentage of adults ages 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day for men and one drink per day for women).

### **Percent Population Heavily Consuming Alcohol**



Data Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005-2011, as presented by CHNA.org

### ***Key Finding***

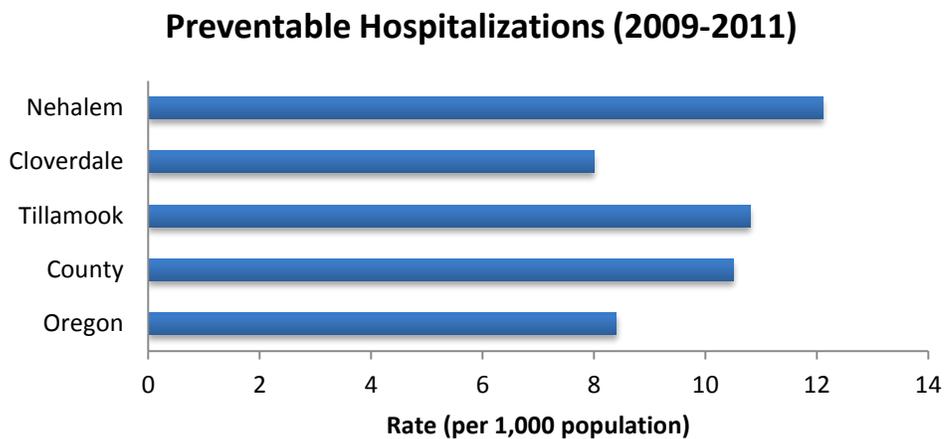
- Nearly 19% of adults in Tillamook County reported heavy alcohol consumption.

## Hospitalizations

### ***Importance to Community Health Development***

In the continuum of the disease process, hospitalization is the last step for patient care, resulting in separation from community resources and family support. Patients are placed in a hospital setting because of advanced disease processes, complex health issues, or catastrophic accidents that require highly specific care for the preservation of life and restoration of health.

The focus of this section of the assessment is to promote appropriate hospital utilization; therefore our focus for the community health assessment will be on Ambulatory Care Sensitive Condition Hospitalizations (ACSC). **ACSCs are conditions for which hospital admission could be prevented by utilization of interventions during primary care.**



Data Source: Compdata [by hospital and ZIP].

### ***Key Finding***

- Preventable hospitalizations remain a concern in the service areas with significantly higher rates in Nehalem and Tillamook service areas, in comparison to the State.

## HEALTH SYSTEMS' READINESS

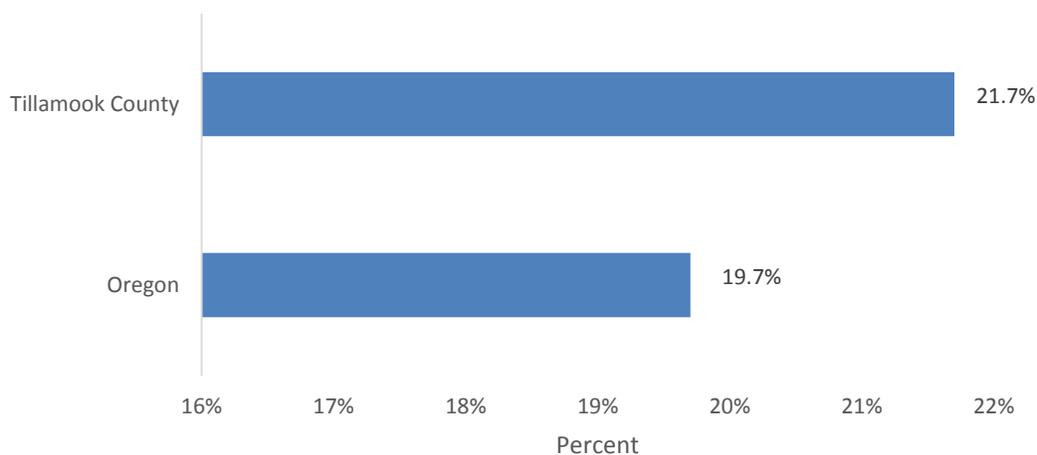
### Health Insurance and Access to Primary Care

#### *Importance to Community Health Development*

Health insurance is a critical determinant of healthcare utilization behaviors and is often considered a key driver for health status.

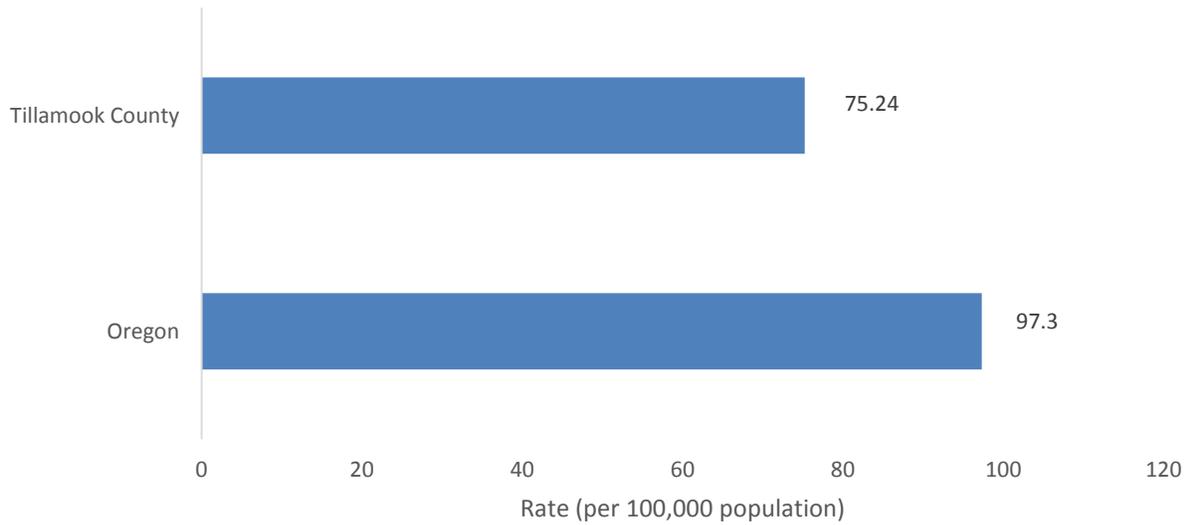
Addressing **the percent of those without health insurance** is relevant to community health development because lack of insurance is a barrier to access basic healthcare services including primary care, preventive care, and specialty care. Data on **access to primary care** reports the number of primary care physicians per 100,000 people in a given location.

#### Percent of Population Without Health Insurance



Data Source: 2010 Census Small Area Health Insurance Estimates [by county]

## Primary Care Provider Rate



Data Source: U.S. Health Resources and Services Administration Area Resource File, 2011 , as presented by CHNA.org

### *Key Findings*

- Over 21% of Tillamook County's population lacks health insurance coverage; a higher percent than Oregon.
- Tillamook County has a lower primary care provider rate, as compared to the State.

## Health Professional Shortage Area and Medically Underserved Areas

### *Importance to Community Health Development*

Health Professional Shortage Areas (HPSAs) are defined as having shortages of primary medical care, dental care, and/or mental health providers. These area may be geographic (a county or service area), demographic (low income population) or institutional (comprehensive health center). The following table highlights the portion of Tillamook’s population living in an HPSA, with stats for Oregon and the United States reported for comparison.

Population Living in Health Professional Shortage Area			
	Tillamook County	Oregon	United States
Total Population	25,250	3,831,074	312,471,327
HPSA Designation Population	10,357	1,173,326	63,421,548
Underserved Population	7,757	704,359	38,748,460
Percent of Total Population Underserved	30.72%	18.39%	12.40%
Percent of Designated Population Underserved	74.90%	60.03%	61.10%

Data Source: U.S. Health Resources and Services Administration Data Warehouse, Health Professional Shortage Area (Components), May 2013, as presented by CHNA.org

Medically underserved areas and populations (MUSAs/Ps) are specific geographic areas or populations that have been designated by the Health Resources and Services Administration as having: too few primary care providers, high infant mortality rate, high poverty level, and/or high elderly population.

MUA designation involves application of the Index of Medical Underservice (IMU) to data on a service area ranging from 0 to 100, where 0 designates a completely underserved area. An area with an IMU of 62.0 or less qualifies as a MUA. IMU takes in to variables such as ratio of primary medical care physicians per 1,000 population, infant mortality rate, percent of population with income below federal poverty level, and percent of population 65 years of age or older.

**Tillamook County is considered a MUA with a score of 61.30**

### *Key Findings*

- Nearly 31% of Tillamook County’s population is underserved due to living in a health professional storage area.
- Tillamook County is a designated MUA.

## PHYSICAL ENVIRONMENT

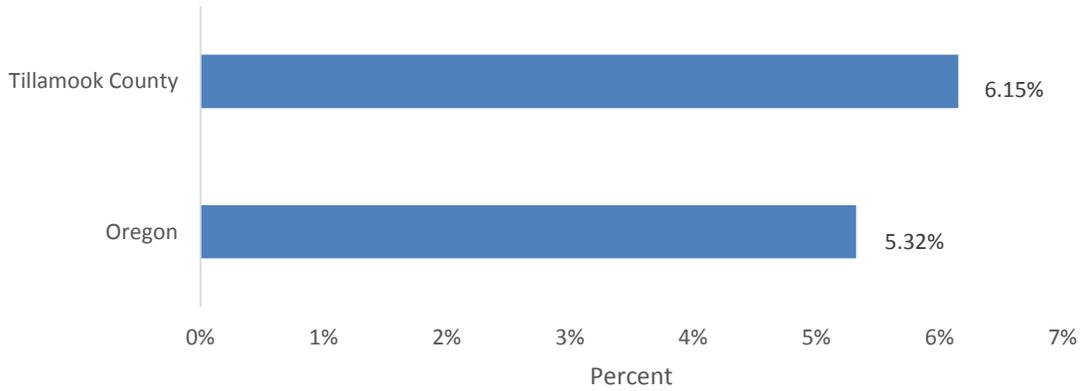
### *Importance to Community Health Development*

Our physical environment can affect our health behaviors and outcomes. Where people live often determine how they live. The following indicators detail healthy food access for low income populations and availability of recreational and fitness facilities in Tillamook County.

**Low Food Access** reports the percentage of the population living in census tracts designated as food deserts. A food desert is defined as a low-income area; where a substantial number of residents have low access to a supermarket or large grocery store. This indicator is relevant because it highlights populations and geographies facing food insecurity.

**Recreation Facility Establishment Rate** reports the number per 100,000 population of recreation and fitness facilities as defined by North American Industry Classification System (NAICS) Code 713940. According to NAICS these establishments are “primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.” This indicator is relevant because access to recreation and fitness facilities encourages physical activity and other healthy behaviors.

### Percent Low Income Population with Low Food Access



Data Source: U.S. Department of Agriculture, Food Access Atlas, 2013, as presented by CHNA.org

Recreational Facility Establishment Rate	
Report Area	Establishment Rate per 100,000 Population
Tillamook County	7.92
Oregon	10.73
United States	9.56

Data Source: U.S. Census Bureau, County Business Patterns, 2011, as presented CHNA.org

#### Key Findings

- Approximately 6% of Tillamook County’s low-income population lacks adequate access to food.
- The rate of fitness facility establishment is much lower in Tillamook County as compared to Oregon.

## THE ART OF LISTENING AND STORIES BEHIND THE STATISTICS: TILLAMOOK COUNTY COMMUNITY HEALTH SURVEY

Leading the way in health care transformation, in 2012 the Oregon Legislature enacted a plan through which local health entities called Coordinated Care Organizations (CCOs) would deliver health care and coverage for people eligible for the Oregon Health Plan (Medicaid), including those also covered by Medicare. CCOs are accountable for health outcomes of the population they serve, and in 2014, they will have one budget that includes mental, physical and ultimately dental care. Oregon CCOs are already bringing forward new models of care that are patient-centered and team-focused. Each CCO is governed by a partnership among health care providers, community members and stakeholders in the health systems that have financial responsibility and risk.

The Columbia Pacific CCO conducted a community health survey of Tillamook County September 15 through October 15 that garnered around 200 responses. This data will be reviewed by the Tillamook Community Advisory Council November-December 2013. Community feedback will be sought about the top 3-5 priorities identified through this survey, after which a plan of action will be created and adopted by the CCO. The preliminary results of that survey have been included in Tillamook Regional Medical Center's 2013 CHNA. TRMC's 2013 CHNA is also being shared with the Columbia Pacific CCO Community Advisory Council, key community health stakeholders and community leaders, with feedback being used to shape action plans and strategies to improve the health of our community.

Initial findings from the survey identified several key themes. Primarily, the participants agreed that access to good doctors, specialists, and outpatient care are strengths in a healthy community. A majority also agreed that preventive care programs and recreational options for all ages are critical components of a healthy environment. Participants also noted that costs and lack of insurance were the main barriers to obtaining treatment.

Participants stated that the top three ways to improve community health include:

- Job opportunities and a healthy economy
- Health prevention and wellness programs
- Access to healthy foods

Three major factors were identified as barriers to good community health:

- High cost of health care/Lack of health insurance
- Alcohol and Drug abuse
- Obesity

Finally, the participants identified the top priority health needs in our community:

- Health education and prevention services,
- Disease prevention screenings,
- Availability of medical appointments after 5pm or on the weekends.

## Community Voices

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“...more collaboration amongst the different health care providers”

“Health care has improved over the past 20 years. We need to continue this trend.”

“Prevention services should be our focus and alternative health care can play an important role in prevention.”

“It's getting better; having the Cover Oregon Health program is wonderful!”

“Need more education and community awareness of benefits of healthy lifestyle. Need recipes and local restaurants that support healthy eating options.”

## NEXT STEPS: CREATING A HEALTHIER COMMUNITY IN 2014

After conducting the CHNA we asked the following questions: **1) What is really hurting our communities? 2) How can we make a difference? 3) What are the high impact interventions? 4) Who are our partners? and, 5) Who needs our help the most?**

The preceding sections of this report identified numerous indicators reflective of community health status. From this analysis, the following key priority areas were identified:

- Children's Health
- Chronic Disease with emphasis on: *heart disease, stroke, and cancer prevention*
- Behavioral Health with emphasis on: *suicide prevention*
- Access to Health Care Services

### Children's Health

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As the smallest voice in a region of minimal resources children are our most at-risk population. Addressing children's health begins at an early stage, from lowering infant mortality rate to preventing childhood obesity. Adequate maternal and child health also encompasses prenatal care, infectious disease prevention and nutrition.

The United States Surgeon General has identified the obesity epidemic as one of the greatest health problems facing the nation today. Childhood obesity has been associated with a number of problems including health, social, and economic consequences. Childhood obesity is related to numerous chronic adult disease including Type II diabetes, cardiovascular disease, several kinds of cancer, and osteoarthritis. Overweight children and adolescents are more likely to become overweight or obese adults. For example, if a child is obese at the age of four, he or she will have a 20 percent likelihood of being overweight as an adult.

**Tillamook Regional Medical Center recognizes that our children are our future** and is committed to improving the health of all children living in the region by: promoting lifelong healthy eating patterns through education and behavior change practices, promoting physically active lifestyles, and supporting community programs that promote overall health.

- Children aged 0-14 years constitute the second largest population group in Tillamook, Cloverdale, and Nehalem Counties
- In Tillamook County, approximately 18% of both eighth and eleventh graders are overweight.

- In Tillamook County, nearly 17% of both eighth and eleventh graders are obese; well above the **Healthy People 2020 objective of less than 9.6%**.
- In Tillamook County, 27% of children (under 18 years of age) live in poverty, a much higher rate than Oregon (~20%).

## Chronic Disease Prevention

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Chronic disease management is a broad term that encompasses many different models for improving care for people with chronic diseases. Elements of a structured chronic disease management program may include a treatment plan with regular monitoring, coordination of care between multiple providers and/or settings, medication management, and support for patient self-management. **Tillamook Regional Medical Center is taking an active role in improving the continuum of care for individuals experiencing chronic disease** and is committed to bridging preventive strategies in the clinical setting, as well as, in the community. This strategy will be focused on heart disease, stroke, cancer, and associated co-morbidities (such as obesity); with coordination among services/programs, as necessary.

- Preventable chronic diseases remain the leading causes of death in all service areas.
- Cancer was the leading cause of death in all areas, with the highest rates in Nehalem.
- Tillamook County has a higher rate of heart disease and stroke mortality than Oregon State and the Healthy People 2020 objective.

## Behavioral Health

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Good mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community. It is estimated that about 17% of U.S adults are considered to be in a state of optimal mental health. Depression is the most common type of mental illness, affecting more than 26% of the U.S. adult population. In addition, alcohol or substance abuse can lead to decreased mental functioning, increase symptoms of mental illness, and result in overall poor performance and lowered quality of life. Behavioral health interventions must comprehensively address both mental illness and substance/alcohol abuse as separate, yet equally severe illnesses. **Tillamook Regional Medical Center recognizes the importance of whole person care and in turn is committed to leading the way to increase access to services for behavioral health as well as drug and alcohol addictions that will improve health outcomes in these areas for our communities.**

- The age-adjusted rate for suicide deaths in Tillamook County is higher than Oregon and the Healthy People 2020 objective for suicide mortality rates.

- Nearly 19% of adults in Tillamook County reported heavy alcohol consumption.
- The City of Tillamook has a higher rate of alcohol-induced death than Cloverdale, Nehalem, Tillamook County, and the state of Oregon.

## Access to Health Services

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Consistent access to primary care and specialty care is critical in ensuring good health outcomes. Access to health services is usually defined as gaining entry into the health care system, accessing a health care location where needed services are provided, and finding a health care provider with whom patients can communicate and trust. Access to health services influences physical, social, and behavioral health status. Moreover, access to health services can impact prevention of disease and disability, detection and treatment of health conditions, quality of life, preventable deaths, and life expectancy. Often the major barriers of accessing health services include: unmet health needs, delays in receiving appropriate care, inability to get preventive services, and preventable hospitalizations. **Tillamook Regional Medical Center is determined to improve the health outcomes of our community and reduce disparities in health care services.**

- Preventable hospitalizations remain a concern in the service areas with significantly higher rates in Nehalem and Tillamook service areas, in comparison to the State.
- Over 21% of Tillamook County's population lacks health insurance coverage; a higher percent than Oregon.
- Tillamook County has a lower primary care provider rate, as compared to the State (75.24 providers per 100,000 people; 97.3 providers per 100,000 people).

## REFERENCES

1. American Lung Association; Epidemiology and Statistics Unit, Research and Health Education (2013). *Estimated prevalence and incidence of lung disease*. Retrieved from <http://www.lung.org/finding-cures/our-research/trend-reports/estimated-prevalence.pdf>
2. Centers for Disease Control and Prevention (2013). *Chronic obstructive pulmonary disorder (COPD)*. Retrieved from <http://www.cdc.gov/copd/index.htm>
3. Centers for Disease Control and Prevention (2013). *Stroke facts and statistics*. Retrieved from <http://www.cdc.gov/stroke/index.htm>
4. Centers for Disease Control and Prevention, National Vital Statistics System: 2003-09. Accessed using CDC WONDER. Retrieved from <http://www.chna.org>
5. Community Commons (2013). *Community health needs assessment: Tillamook County, Oregon* [Database]. Retrieved from <http://www.chna.org>
6. COMPdata Insight (2013). *Custom dataset*. Purchased from COMPdata Informatics, Illinois Hospital Association, Business Solutions Division.
7. County Health Rankings & Roadmaps; Robert Wood Johnson Foundation (2013). *Tillamook County, Oregon*. Retrieved from [countyhealthrankings.org/](http://countyhealthrankings.org/)
8. Healthy People 2020. Retrieved from <http://www.healthypeople.gov/2020/default.aspx>
9. LLUH, Loma Linda University Health; Center for Innovation & Strategy, Community Health Development (2013). *Whole Community Care Model*. Loma Linda, CA, Author.
10. National Network of Libraries of Medicine (2013). *Health literacy*. Retrieved from <http://nnlm.gov/outreach/consumer/hlthlit.html>
11. Nielson (2013). *Custom dataset*. Purchased from Nielson Holdings.
12. Oregon Department of Human Services, Public Health Division, Center for Health Statistics (2013). *Oregon behavioral risk factor surveillance system (BRFSS): Survey results by county, 2006-2009*. Retrieved from <https://public.health.oregon.gov/BirthDeathCertificates/Surveys/AdultBehaviorRisk/county/index/Pages/index.aspx>
13. Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Section (2012). *Oregon overweight, obesity, physical activity and nutrition facts*. Retrieved from <http://public.health.oregon.gov/PreventionWellness/PhysicalActivity/Pages/pubs.aspx>
14. State Cancer Profiles: 2006-10. Retrieved from <http://www.chna.org>
15. Tillamook County Health Department (2012). *Tillamook county health department comprehensive local public health authority plan, 2012-2013*. Retrieved from

[http://public.health.oregon.gov/ProviderPartnerResources/LocalHealthDepartmentResources/Documents/Annual%20Plans/AnnualPlan2012-2013/Tillamook\\_County\\_2012\\_Annual\\_Plan.pdf](http://public.health.oregon.gov/ProviderPartnerResources/LocalHealthDepartmentResources/Documents/Annual%20Plans/AnnualPlan2012-2013/Tillamook_County_2012_Annual_Plan.pdf)

16. U.S. Census Bureau (2013). *American fact finder* [Database]. Retrieved from <http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>
17. U.S. Census Bureau, Small Area Income and Poverty Estimates (2011). *Interactive SAIP Data and Mapping Tool: 2011, Oregon, Tillamook County*. Retrieved from <http://www.census.gov/did/www/saipe/data/interactive/#>
18. U.S. Department of Commerce; Bureau of Economic Analysis (2012). *County BEARFACTS: Tillamook County, Oregon*. Retrieved from <http://www.bea.gov/regional/bearfacts/>

## APPENDIX A: EXISTING FACILITIES AND RESOURCES

As part of our assessment, we compiled a list of existing facilities and resources in the area who were working to address health needs in our community. This was done not only to fulfill the legal requirements set forth by ACA, but also to educate ourselves on community partners and to look for potential connections.

Name	Location	Facility Type
<b>Portland Adventist Medical Center*</b>	10123 SE Market St Portland, OR 97216	Hospital & Northwest Regional Heart & Vascular
<b>Providence Seaside Hospital</b>	725 S Wahanna Rd, Seaside, OR	Hospital
<b>Providence St. Vincent Hospital</b>	9205 SW Barnes Road Portland, OR 97225	Hospital & Telestroke Network
<b>Oregon Health Science University (OHSU)</b>	3181 SW Sam Jackson Park Rd Portland, OR 97239	Hospital
<b>Samaritan Coastal Clinic</b>	825 NW Hwy 101 Lincoln City , Oregon 97367	Family Practice/ Internal Medicine
<b>Samaritan Lincoln City Medical Center</b>	2870 NE West Devils Lake Road Lincoln City , Oregon 97367	Family Practice/ Internal Medicine
<b>Samaritan North Lincoln Hospital</b>	3043 NE 28 <sup>th</sup> St. Lincoln City, OR 97367	Hospital
<b>Samaritan Obstetrics &amp; Gynecology, Lincoln City</b>	2930 NE West Devils Lake Road Suite 3 Lincoln City , Oregon 97367	Obstetrics/ Gynecology
<b>Samaritan Surgical Clinic</b>	3100 Northeast 28th St, Suite B Lincoln City, OR 97367	Specialty Care
<b>The Rinehart Clinic</b>	230 Rowe St Wheeler, OR 97147	Clinic
<b>Tillamook Health Department – Family Health Center</b>	801 Pacific Avenue Tillamook, OR 97141	Public Health & Primary Care Clinics
<b>Tillamook Health Department – South County Health Center</b>	34335 South Hwy 101 Cloverdale, OR 97112	
<b>Tillamook Family Counseling Center</b>	906 Main Ave Tillamook, OR 97141	Mental Health Clinic
<b>Tuality Community Hospital</b>	335 Southeast 8th Avenue Hillsboro, OR 97123	Hospital

\*Member of Adventist Health

## APPENDIX B: COMMUNITY PARTNERS

Tillamook Regional Medical Center would like to acknowledge and thank our community partners for serving as a resource in conducting this community health needs assessment and assisting in the process:

<ul style="list-style-type: none"> <li>• Bay City United Methodist Church</li> <li>• Beaver Community Church</li> <li>• Bizeau Dentistry</li> <li>• Calvary Bible Church</li> <li>• CARE, Inc.</li> <li>• Clatsop Community College</li> <li>• Coastal Health Center, PC</li> <li>• Covenant Community Church</li> <li>• First Christian Church</li> <li>• Healthy Start of Tillamook</li> <li>• Hope Chest Thrift Shop Volunteers</li> <li>• Kiwanis Club of Tillamook</li> <li>• Living Water Fellowship</li> <li>• Marie Mills, Inc.</li> <li>• Medical Reserve Corps-North Tillamook County</li> <li>• Neah-Kah-Nie School District 56</li> <li>• Nehalem Bay House</li> <li>• Nehalem Bay United Methodist Church</li> <li>• Nehalem Bay Fire &amp; Rescue</li> <li>• Nehalem Valley Care Center</li> <li>• Nestucca Rural Fire Protection District</li> <li>• Nestucca Valley School District 101</li> <li>• Netarts Oceanside Fire District</li> <li>• North Coast Bible Church</li> <li>• Northwest Regional Education Service District</li> <li>• NW Senior &amp; Disability Services</li> <li>• Pacific City-Nestucca Chamber of Commerce</li> <li>• Positive Youth Development Coalition</li> <li>• Redeemer Lutheran Church</li> <li>• Sacred Heart Parish</li> </ul>	<ul style="list-style-type: none"> <li>• The Rinehart Clinic</li> <li>• Rockaway Community Church</li> <li>• St. John's United Church of Christ</li> <li>• St. Peter Lutheran Church</li> <li>• Sandcreek Dental</li> <li>• Tillamook Adventist School</li> <li>• Tillamook Area Chamber of Commerce</li> <li>• Tillamook ARC</li> <li>• Tillamook Bay Community College</li> <li>• Tillamook Bay Dental</li> <li>• Tillamook Childhood Obesity Taskforce</li> <li>• Tillamook Christian Center</li> <li>• Tillamook Christian Ministerial Association</li> <li>• Tillamook Church of the Nazarene</li> <li>• Tillamook County Breast Health Coalition</li> <li>• Tillamook County Emergency Communications District</li> <li>• Tillamook County Futures Council</li> <li>• Tillamook County Health Department</li> <li>• Tillamook County United Way</li> <li>• Tillamook County Women's Resource Center</li> <li>• Tillamook Diabetes Coalition</li> <li>• Tillamook Drug &amp; Alcohol Prevention Coalition</li> <li>• Tillamook Family Counseling Center</li> <li>• Tillamook Family YMCA</li> <li>• Tillamook Fire Defense Board</li> <li>• Tillamook Seventh-day Adventist Church</li> <li>• Tillamook School District 9</li> <li>• Tillamook United Methodist Church</li> <li>• TLC Federal Credit Union</li> <li>• US Coast Guard, Garibaldi Station</li> </ul>
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